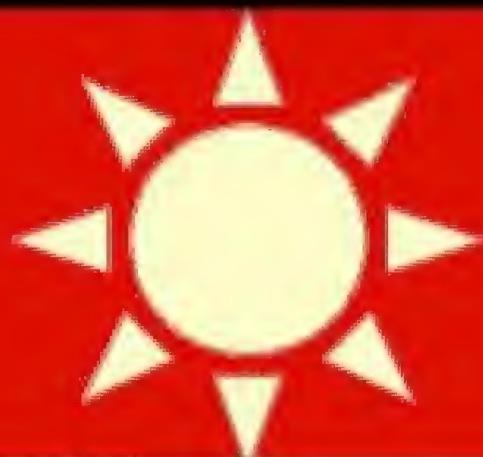


Anand's Atlas of Histology



Major.Dr.A.Anand

ANAND'S ATLAS OF HISTOLOGY

WEB VERSION – 1.0

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ANAND'S ATLAS OF HISTOLOGY

THIS ATLAS WILL SERVE AS A RAPID REFERENCE
HANDBOOK FOR UNDERGRADUATE MEDICAL
STUDENTS AND POSTGRADUATES PRIOR TO
EXAMS

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ANAND'S ATLAS OF HISTOLOGY

THIS BOOK IS DIVIDED INTO TWO SECTIONS
EACH SECTION CONTAINS COLOUR PLATES
EACH COLOUR PLATE CONTAINS PICTURES IN
10X AND 40X VIEWS
EACH COLOUR PLATE IS FOLLOWED BY A
FEW IDENTIFICATION POINTS OF THE
PICTURE

SECTION – 1 = GENERAL HISTOLOGY

SECTION – 2 = SYSTEMIC HISTOLOGY

ANAND'S ATLAS OF HISTOLOGY

SECTION – 1

GENERAL HISTOLOGY

ANAND'S ATLAS OF HISTOLOGY

LIST OF COLOUR PLATES

SMOOTH MUSCLE

SKELETAL MUSCLE

CARDIAC MUSCLE

HYALINE CARTILAGE

WHITE FIBROCARTILAGE

ELASTIC CARTILAGE

COMPACT BONE – LONGITUDINAL SECTION

COMPACT BONE – TRANSVERSE SECTION

LIST OF COLOUR PLATES

LOOSE AREOLAR TISSUE

ADIPOSE TISSUE

THICK SKIN

THIN SKIN

PERIPHERAL NERVE – LONGITUDINAL SECTION

PERIPHERAL NERVE – TRANSVERSE SECTION

ELASTIC ARTERY

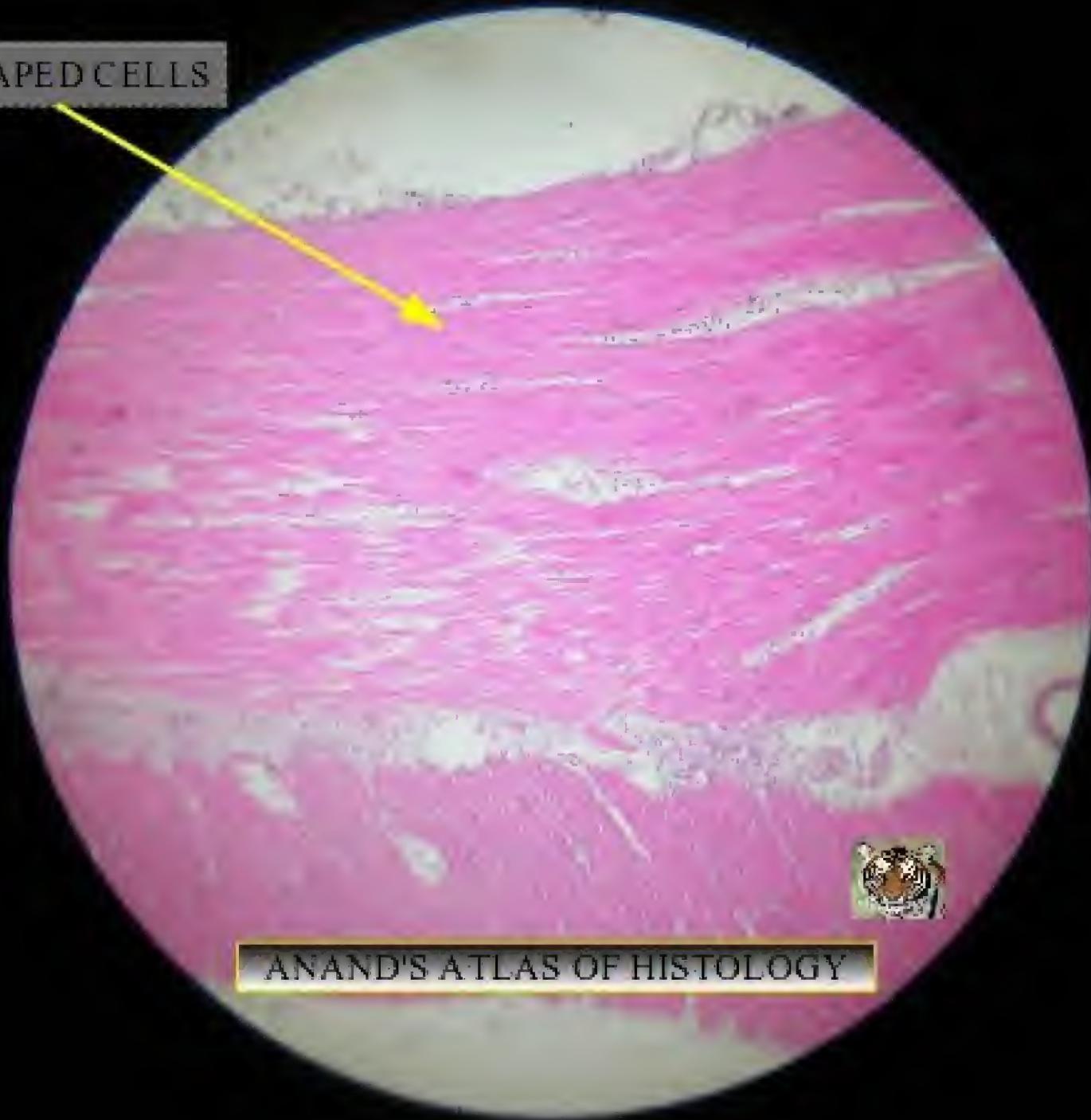
MUSCULAR ARTERY

LARGE VEIN

SMOOTH MUSCLE

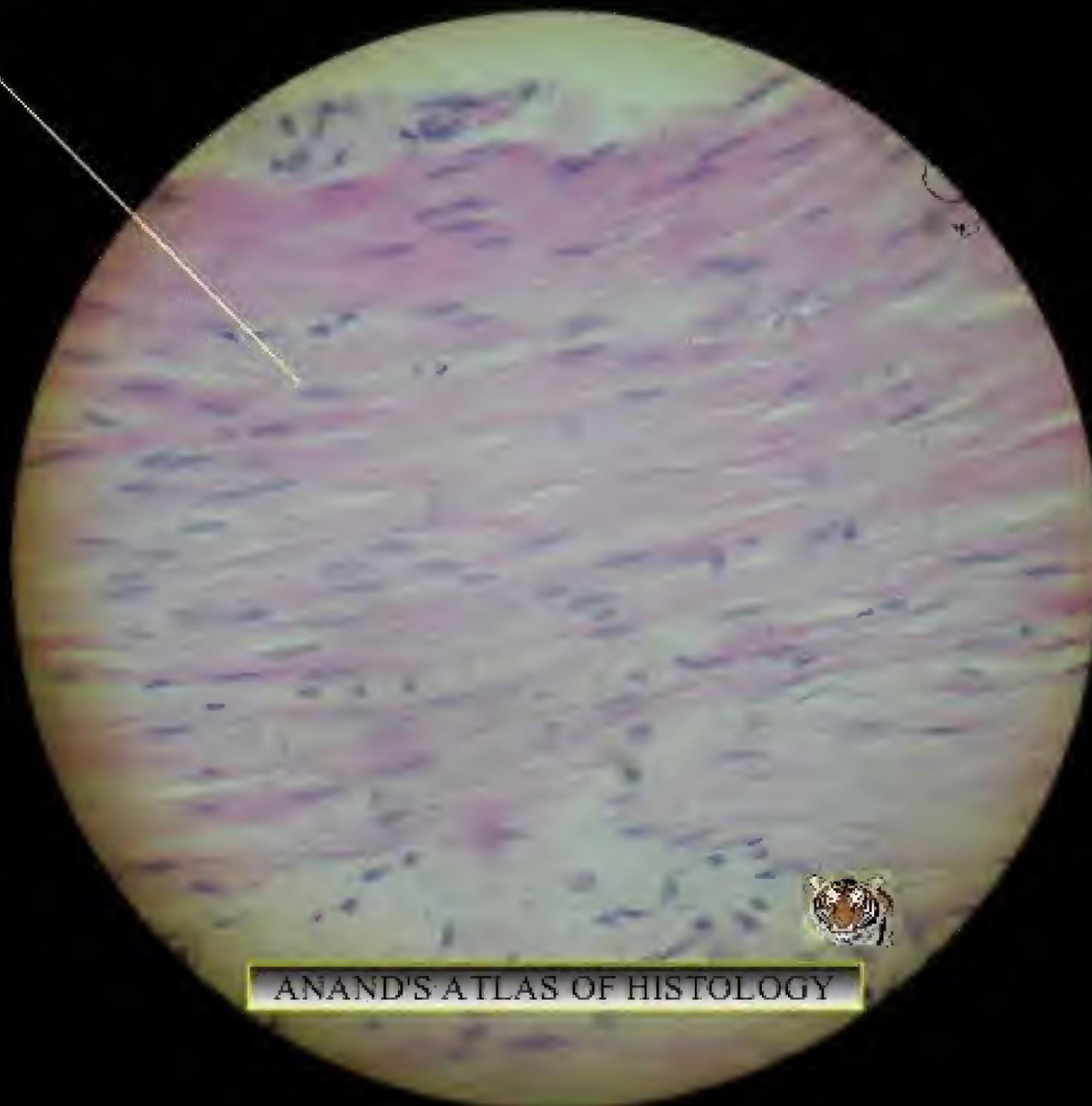
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SPINDLE SHAPED CELLS



ANAND'S ATLAS OF HISTOLOGY

CENTRAL NUCLEUS



ANAND'S ATLAS OF HISTOLOGY

SMOOTH MUSCLE

POINTS FOR IDENTIFICATION

- 1. MYOCYTES ARE SPINDLE SHAPED**
- 2. MYOCYTES CONTAIN CENTRAL NUCLEUS**

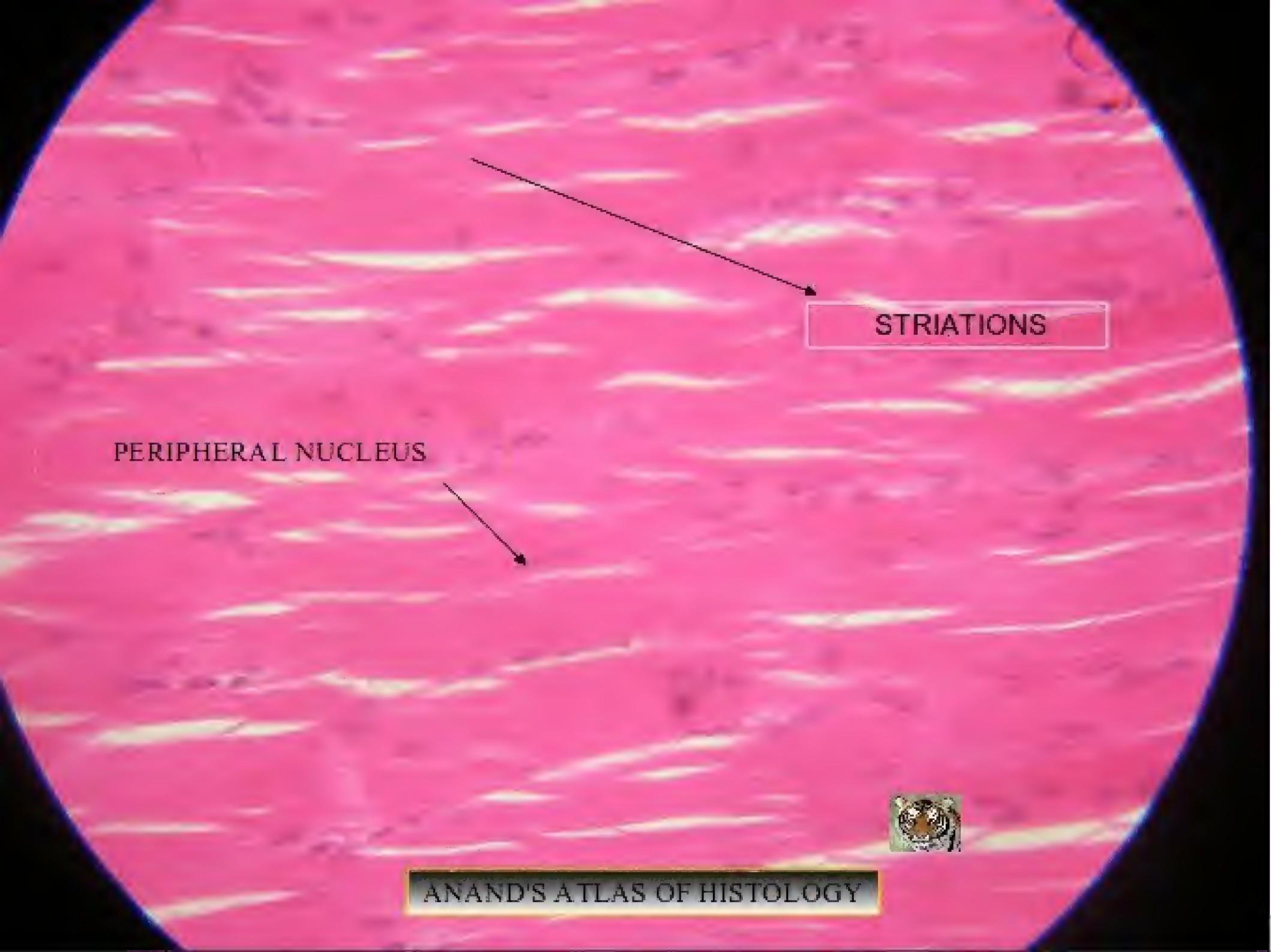
SKELETAL MUSCLE

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MUSCLE FIBRES DO NOT BRANCH



ANAND'S ATLAS OF HISTOLOGY



STRIATIONS

PERIPHERAL NUCLEUS



SKELETAL MUSCLE

POINTS FOR IDENTIFICATION

1. MUSCLE FIBRES DO NOT BRANCH
2. NUCLEUS IS LOCATED IN THE PERIPHERY
3. PRESENCE OF CROSS STRIATIONS

CARDIAC MUSCLE

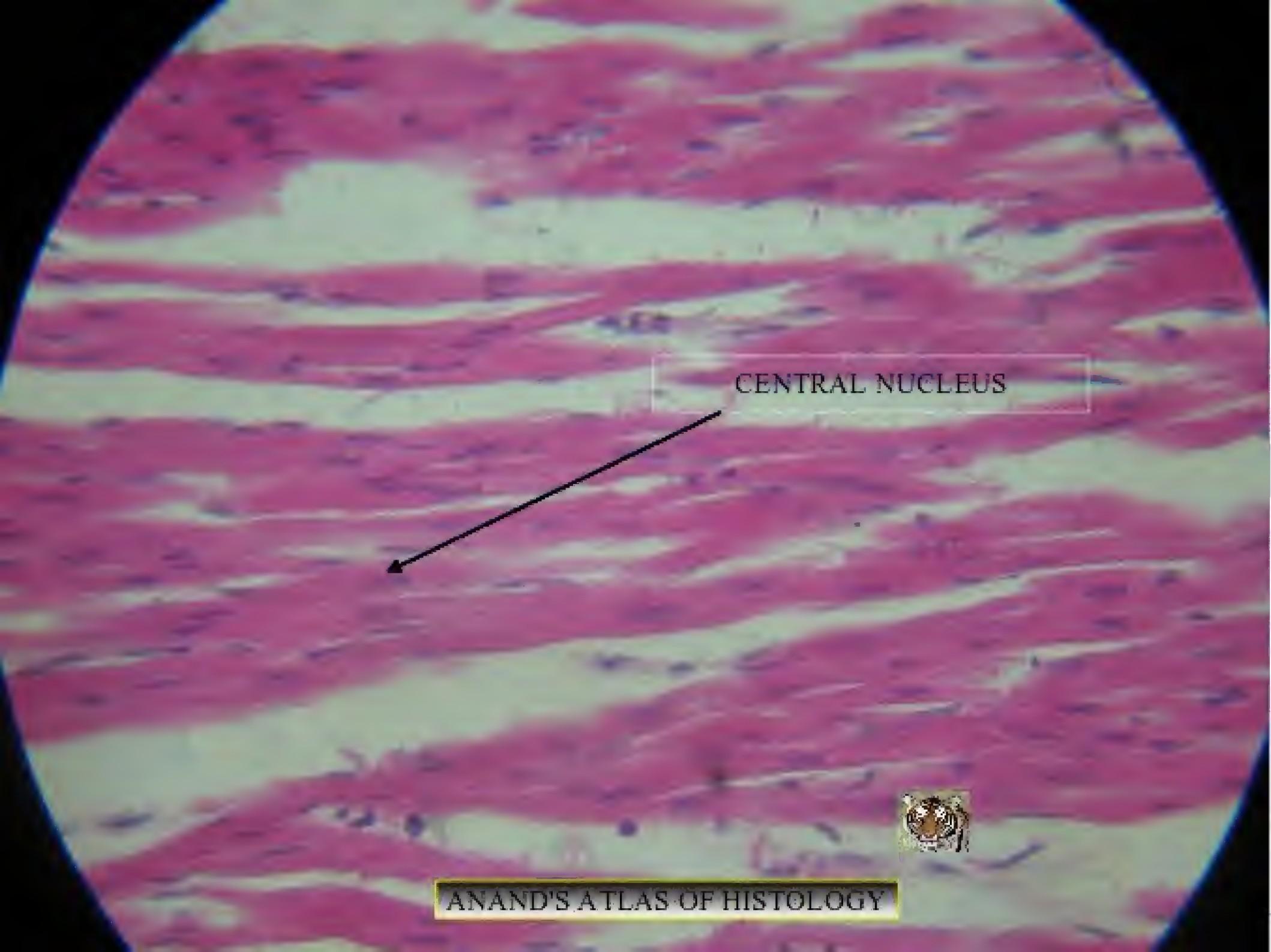
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FIBRES ARE BRANCHING



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CENTRAL NUCLEUS

CARDIAC MUSCLE

POINTS FOR IDENTIFICATION

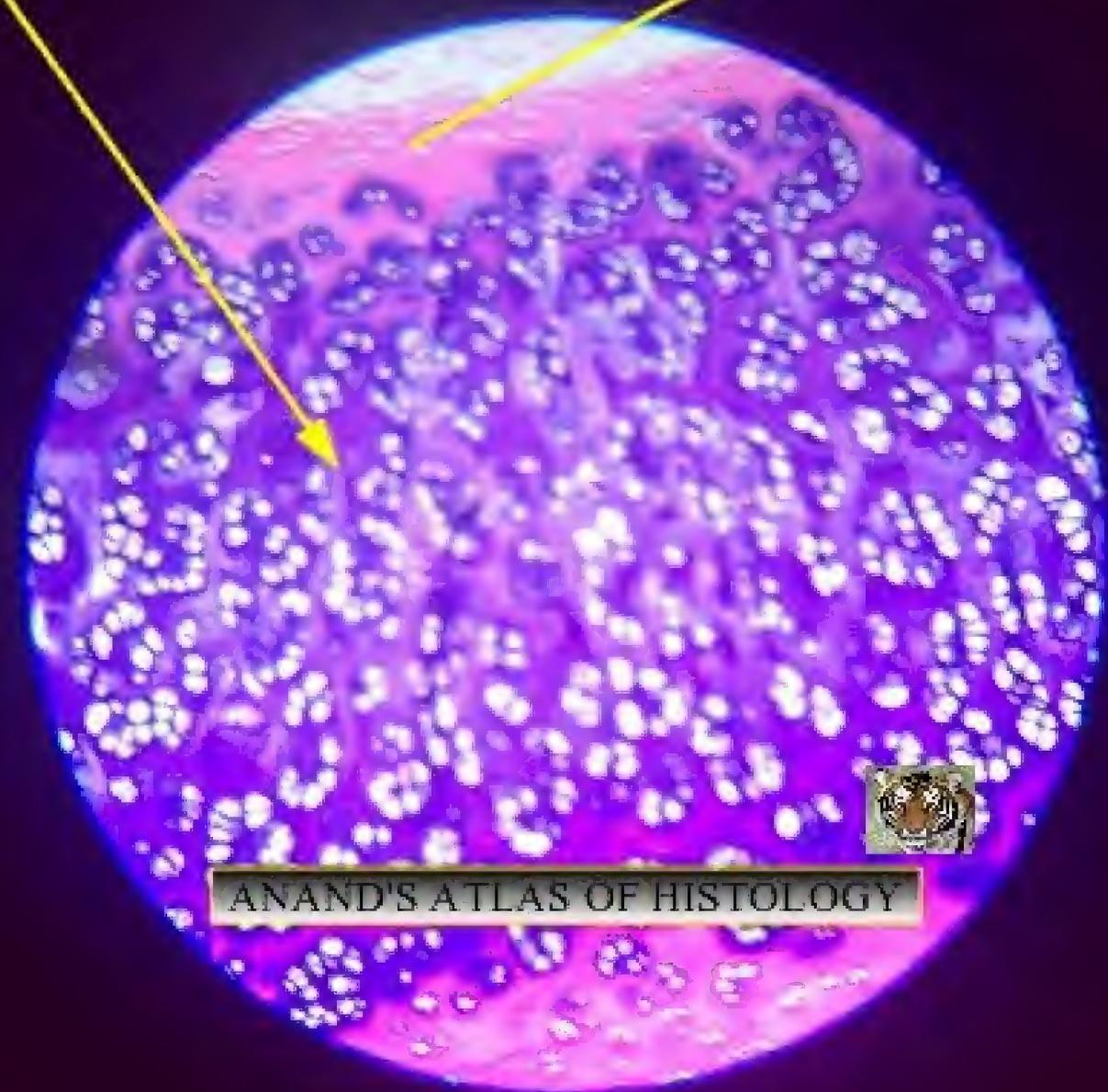
1. MUSCLE FIBRES ARE BRANCHING
2. NUCLEUS IS CENTRALLY PLACED
3. PRESENCE OF INTERCALATED DISC

HYALINE CARTILAGE

ANAND'S ATLAS OF HISTOLOGY

MATRIX

PERICHONDRIUM



ANAND'S ATLAS OF HISTOLOGY

CELL NEST

CHONDROCYTE

MATRIX

TERRITORIAL MATRIX

HYALINE CARTILAGE

POINTS FOR IDENTIFICATION

- 1. PRESENCE OF PERICHONDRIUM**
- 2. PRESENCE OF CELL NESTS**
- 3. PRESENCE OF CHONDROCYTES IN CELL
NESTS**
- 4. MATRIX CONTAINS COLLAGEN FIBRES**

WHITE FIBRO CARTILAGE

ANAND'S ATLAS OF HISTOLOGY

COLLAGEN FIBRES



ANAND'S ATLAS OF HISTOLOGY

A circular histological micrograph showing several pink-stained, polygonal cells embedded in a light-colored, textured matrix. One cell in the upper right is labeled "CHONDROCYTE" with a black arrow pointing to it.

CHONDROCYTE



WHITE FIBRO CARTILAGE

POINTS FOR IDENTIFICATION

- 1. ABSENCE OF PERICHONDRIUM**
- 2. CHONDROCYTES ARE SEEN
ARRANGED IN ROWS**
- 3. MATRIX IS MADE OF COLLAGEN
FIBRES**

ELASTIC CARTILAGE

ANAND'S ATLAS OF HISTOLOGY

CHONDROCYTES IN LACUNAE



ANAND'S ATLAS OF HISTOLOGY

CHONDROCYTE IN LACUNAE



MATRIX



ELASTIC FIBRES



ANAND'S ATLAS OF HISTOLOGY

ELASTIC CARTILAGE

POINTS FOR IDENTIFICATION

- 1. CHONDROCYTES ARE PRESENT IN LACUNAE**
- 2. MATRIX IS MADE OF ELASTIC FIBRES PREDOMINANTLY**
- 3. PERICHONDRIUM IS PRESENT**

COMPACT BONE – LONGITUDINAL SECTION

ANAND'S ATLAS OF HISTOLOGY



COLUMNS

OSTEONS

ANAND'S ATLAS OF HISTOLOGY

VOLKMAN'S CANAL



HAVERSIAN CANALS

OSTEONS



COMPACT BONE - LONGITUDINAL SECTION

POINTS FOR IDENTIFICATION

- 1. OSTEONS ARE SEEN ARRANGED IN COLUMNS**
- 2. VOLKMAN'S CANALS CONNECT HAVERSIAN CANALS WITH THE PERIOSTEUM**

COMPACT BONE – TRANSVERSE SECTION

ANAND'S ATLAS OF HISTOLOGY

INTERSTITIAL LAMELLAE

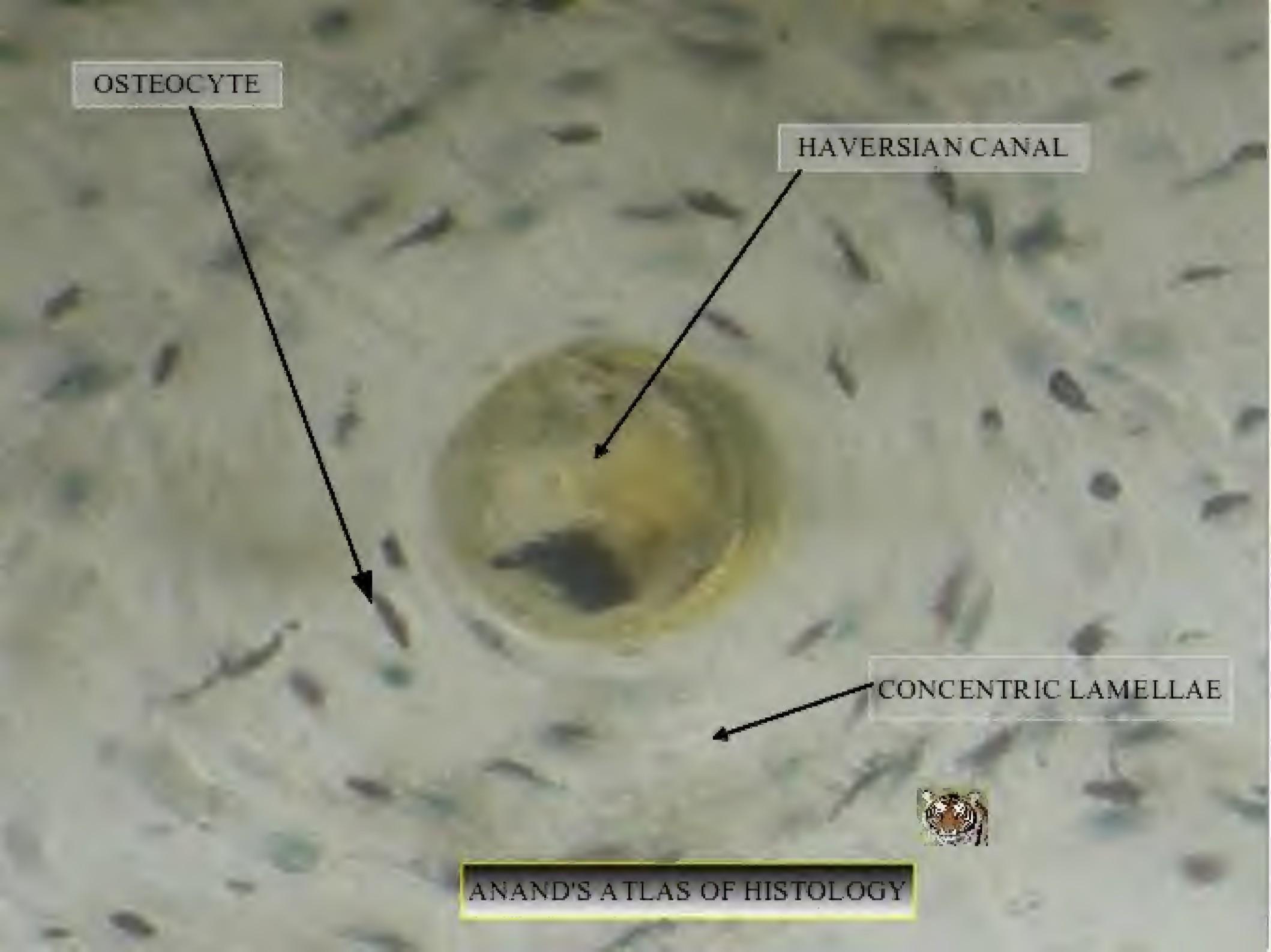


CONCENTRIC LAMELLAE



ANAND'S ATLAS OF HISTOLOGY





OSTEOCYTE

HAVERSIAN CANAL

CONCENTRIC LAMELLAE



COMPACT BONE – TRANSVERSE SECTION

POINTS FOR IDENTIFICATION

1. CONCENTRIC LAMELLAR ARRANGEMENT OF OSTEONS
2. INTERSTITIAL LAMELLAE IS SEEN
3. PRESENCE OF HAVERSIAN CANAL

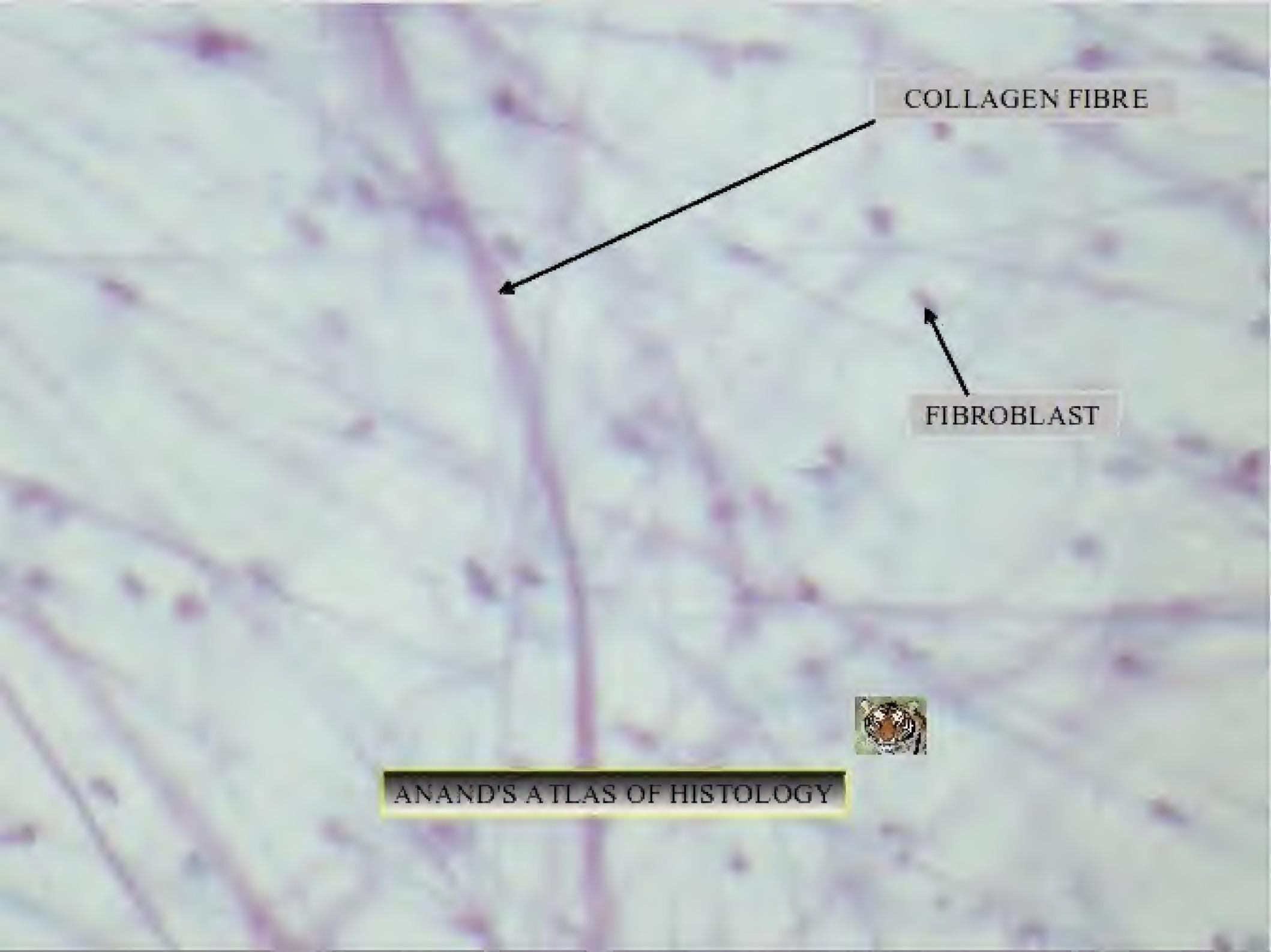
LOOSE AREOLAR TISSUE

ANAND'S ATLAS OF HISTOLOGY

COLLAGEN FIBRE



ANAND'S ATLAS OF HISTOLOGY



COLLAGEN FIBRE

FIBROBLAST



ANAND'S ATLAS OF HISTOLOGY

LOOSE AREOLAR TISSUE

POINTS FOR IDENTIFICATION

- 1. LOOSELY ARRANGED COLLAGEN FIBRES ARE SEEN**
- 2. FIBROBLASTS ARE SEEN**

ADIPOSE TISSUE

ANAND'S ATLAS OF HISTOLOGY

ADIPOCYTE

ANAND'S ATLAS OF HISTOLOGY

NUCLEUS IS PUSHED TO THE PERIPHERY

ADIPOCYTE

SIGNET RING APPEARANCE



ADIPOSE TISSUE

POINTS FOR IDENTIFICATION

- 1. ADIPOCYTES ARE SEEN**
- 2. NUCLEUS OF THE ADIPOCYTE IS PUSHED
TO THE PERIPHERY**
- 3. CYTOPLASM APPEARS AS A PINK RIM**

THICK SKIN

ANAND'S ATLAS OF HISTOLOGY

KERATIN LAYER

EPIDERMIS

DERMIS

ANAND'S ATLAS OF HISTOLOGY

STRATIFIED SQUAMOUS KERATINISED EPITHELIUM

EPIDERMAL PAPILLAE

DERMAL PAPILLAE



THICK SKIN

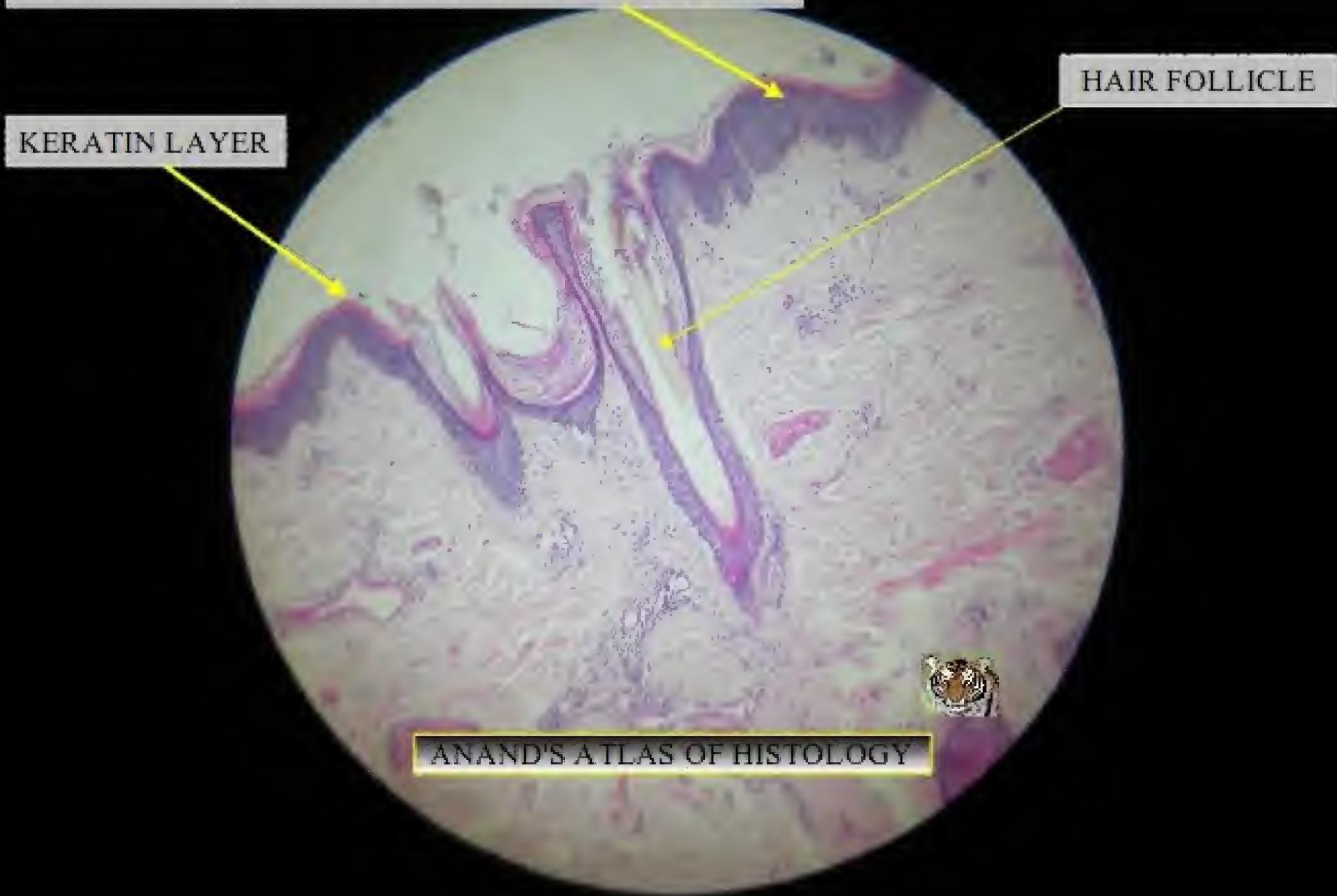
POINTS FOR IDENTIFICATION

- 1. LINED BY STRATIFIED SQUAMOUS EPITHELIUM**
- 2. PRESENCE OF KERATIN LAYER**
- 3. EPIDERMAL PROJECTIONS INTO DERMIS ARE EPIDERMAL PAPILLAE**
- 4. DERMAL PROJECTIONS INTO EPIDERMIS ARE DERMAL PAPILLAE**

THIN SKIN

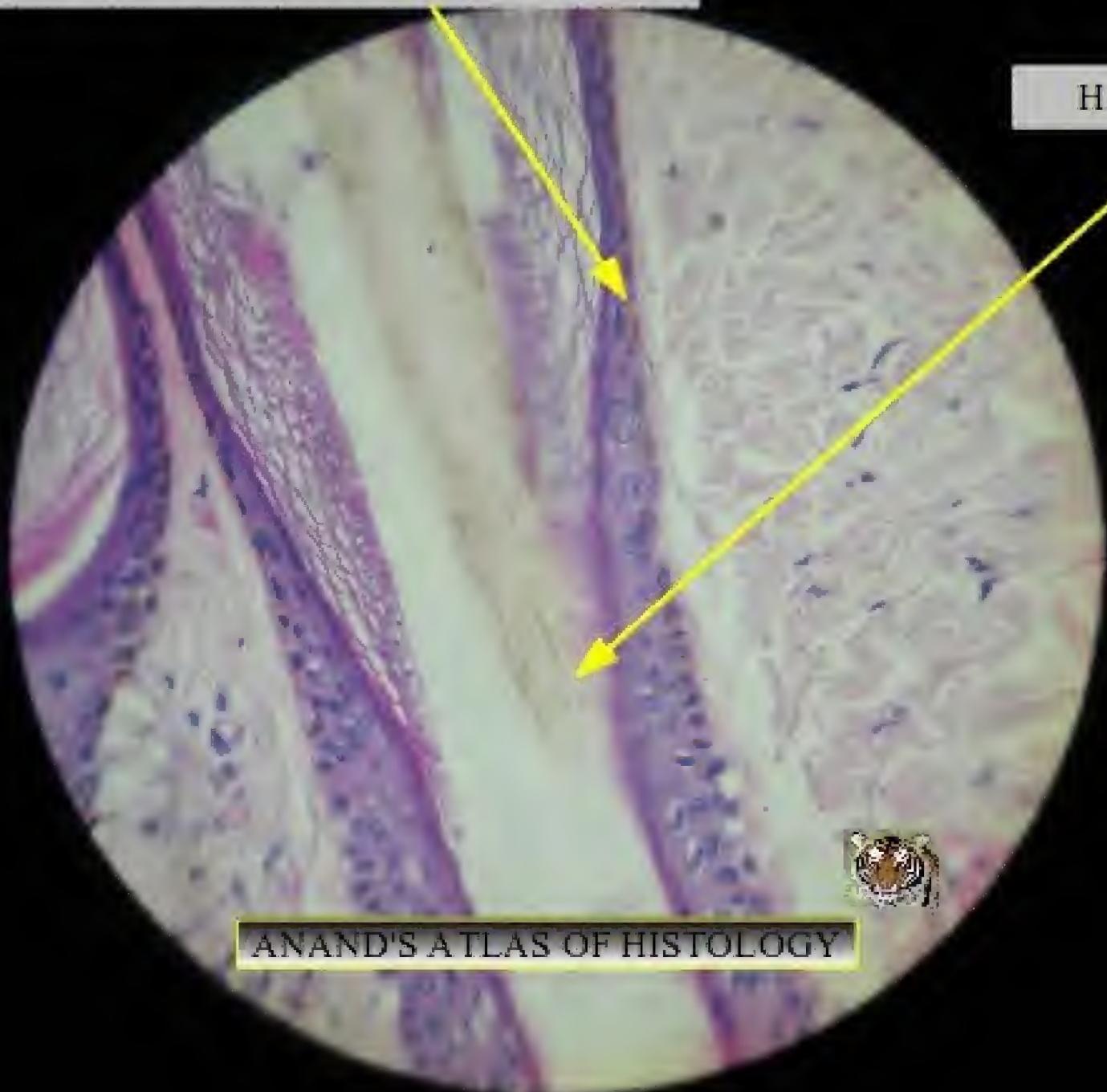
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STRATIFIED SQUAMOUS KERATINISED EPITHELIUM



STRATIFIED SQUAMOUS KERATINISED EPITHELIUM

HAIR ROOT



ANAND'S ATLAS OF HISTOLOGY

THIN SKIN

POINTS FOR IDENTIFICATION

- 1. PRESENCE OF HAIR FOLLICLE**
- 2. LINED BY STRATIFIED SQUAMOUS KERATINISED EPITHELIUM**
- 3. PRESENCE OF DERMIS AND EPIDERMIS**

PERIPHERAL NERVE – LONGITUDINAL SECTION

ANAND'S ATLAS OF HISTOLOGY

CUT SECTIONS OF AXONS



ANAND'S ATLAS OF HISTOLOGY

NODES OF RANVIER

MYELIN SHEATH



ANAND'S ATLAS OF HISTOLOGY

PERIPHERAL NERVE – LONGITUDINAL SECTION

POINTS FOR IDENTIFICATION

- 1. CUT SECTIONS OF AXONS ARE SEEN**
- 2. AXONS ARE LINED BY MYELIN SHEATH**
- 3. NODES OF RANVIER ARE SEEN**

PERIPHERAL NERVE – TRANSVERSE SECTION

ANAND'S ATLAS OF HISTOLOGY

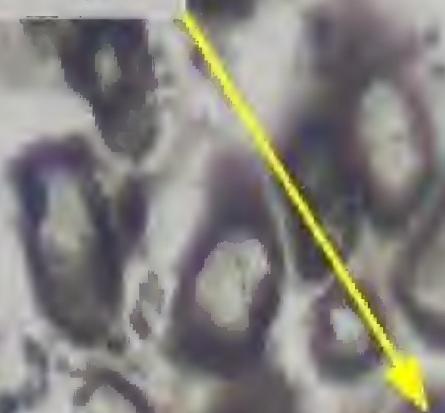
NERVE BUNDLES

ANAND'S ATLAS OF HISTOLOGY

NERVE BUNDLES



PERINEURIUM



ANAND'S ATLAS OF HISTOLOGY

PERIPHERAL NERVE – TRANSVERSE SECTION

POINTS FOR IDENTIFICATION

- 1. CUT SECTION OF NERVE FIBRE
BUNDLES ARE SEEN**
- 2. PERINEURIUM IS SEEN**

ELASTIC ARTERY

ELASTIC FIBRES



ANAND'S ATLAS OF HISTOLOGY

TUNICA INTIMA



TUNICA MEDIA



ANAND'S ATLAS OF HISTOLOGY

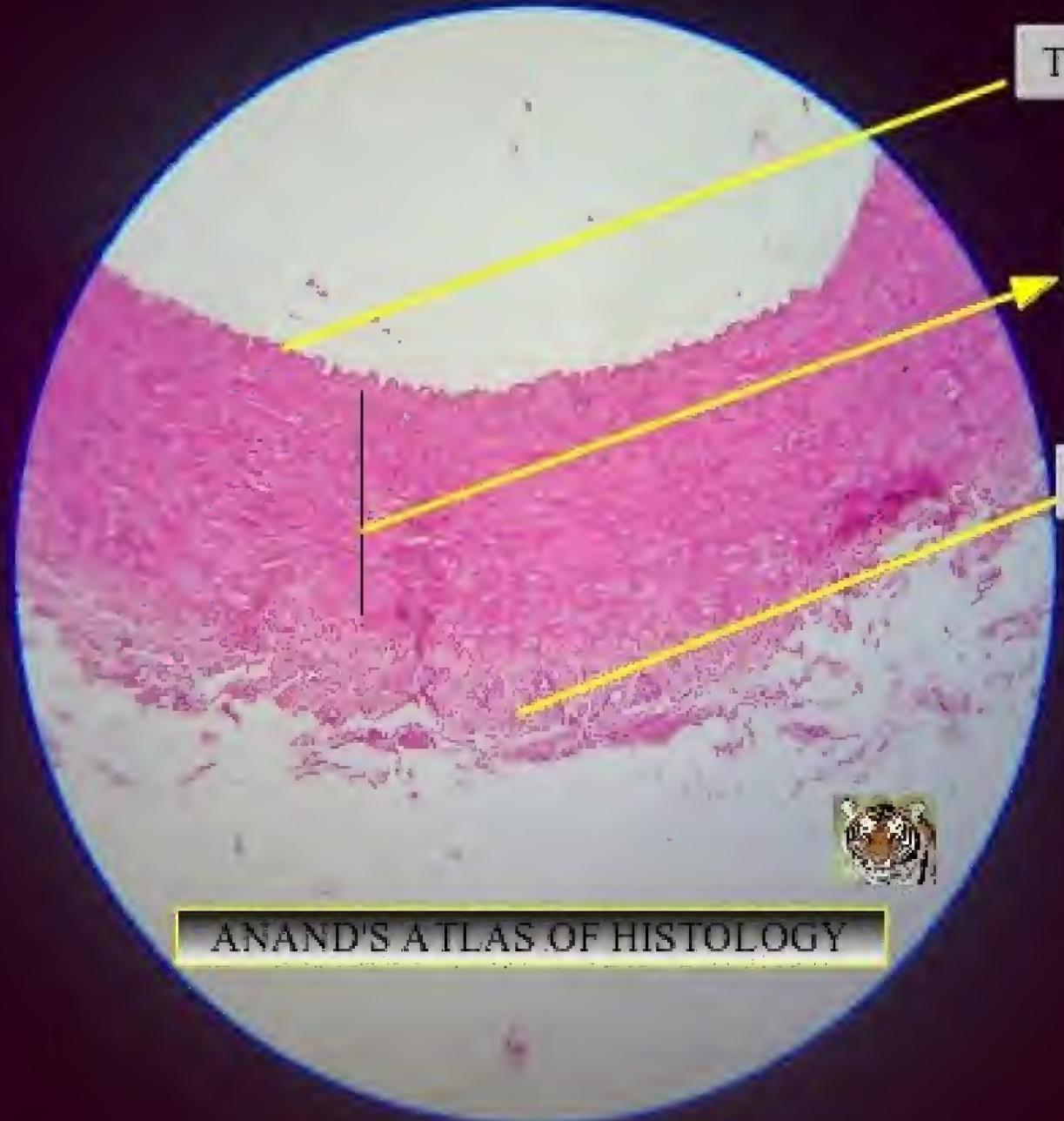
ELASTIC ARTERY

POINTS FOR IDENTIFICATION

- 1. CONSISTS OF THREE LAYERS, TUNICA INTIMA, TUNICA MEDIA AND TUNICA ADVENTITIA FROM INSIDE TO OUTSIDE**
- 2. TUNICA MEDIA IS LARGE**
- 3. TUNICA MEDIA PREDOMINANTLY CONSISTS OF ELASTIC FIBRES**

MUSCULAR ARTERY

ANAND'S ATLAS OF HISTOLOGY



TUNICA INTIMA

TUNICA MEDIA

TUNICA ADVENTITIA

ANAND'S ATLAS OF HISTOLOGY

TUNICA INTIMA

This image shows a cross-section of an artery wall under a microscope. The tunica intima, the innermost layer, is visible at the top, appearing thin and pinkish. Below it is the tunica media, which is thicker and contains many wavy, pinkish-red smooth muscle fibers. The outermost layer is the tunica adventitia, which is a thick, dense layer of connective tissue.

TUNICA MEDIA
WITH
SMOOTH MUSCLE
FIBRES



MUSCULAR ARTERY

POINTS FOR IDENTIFICATION

1. CONSISTS OF THREE LAYERS, TUNICA INTIMA, TUNICA MEDIA AND TUNICA ADVENTITIA FROM INSIDE TO OUTSIDE
2. TUNICA MEDIA IS LARGE
3. TUNICA MEDIA PREDOMINANTLY CONSISTS OF SMOOTH MUSCLE FIBRES

LARGE VEIN

ANAND'S ATLAS OF HISTOLOGY

TUNICA MEDIA

TUNICA INTIMA

TUNICA ADVENTITIA

ANAND'S ATLAS OF HISTOLOGY

TUNICA ADVENTITIA

TUNICA INTIMA

ANAND'S ATLAS OF HISTOLOGY

LARGE VEIN

POINTS FOR IDENTIFICATION

1. CONSISTS OF THREE LAYERS, TUNICA INTIMA, TUNICA MEDIA AND TUNICA ADVENTITIA FROM INSIDE TO OUTSIDE
2. TUNICA ADVENTITIA IS LARGE
3. TUNICA ADVENTITIA PREDOMINANTLY CONSISTS OF SMOOTH MUSCLE FIBRES AND COLLAGEN FIBRES

SECTION – 2

SYSTEMIC HISTOLOGY

ANAND'S ATLAS OF HISTOLOGY

LIST OF SYSTEMS

LYMPHATIC SYSTEM

DIGESTIVE SYSTEM

RESPIRATORY SYSTEM

EXCRETORY SYSTEM

REPRODUCTIVE SYSTEM – MALE

REPRODUCTIVE SYSTEM – FEMALE

LIST OF SYSTEMS

ENDOCRINE SYSTEM
SPECIAL SENSORY ORGANS
CENTRAL NERVOUS SYSTEM

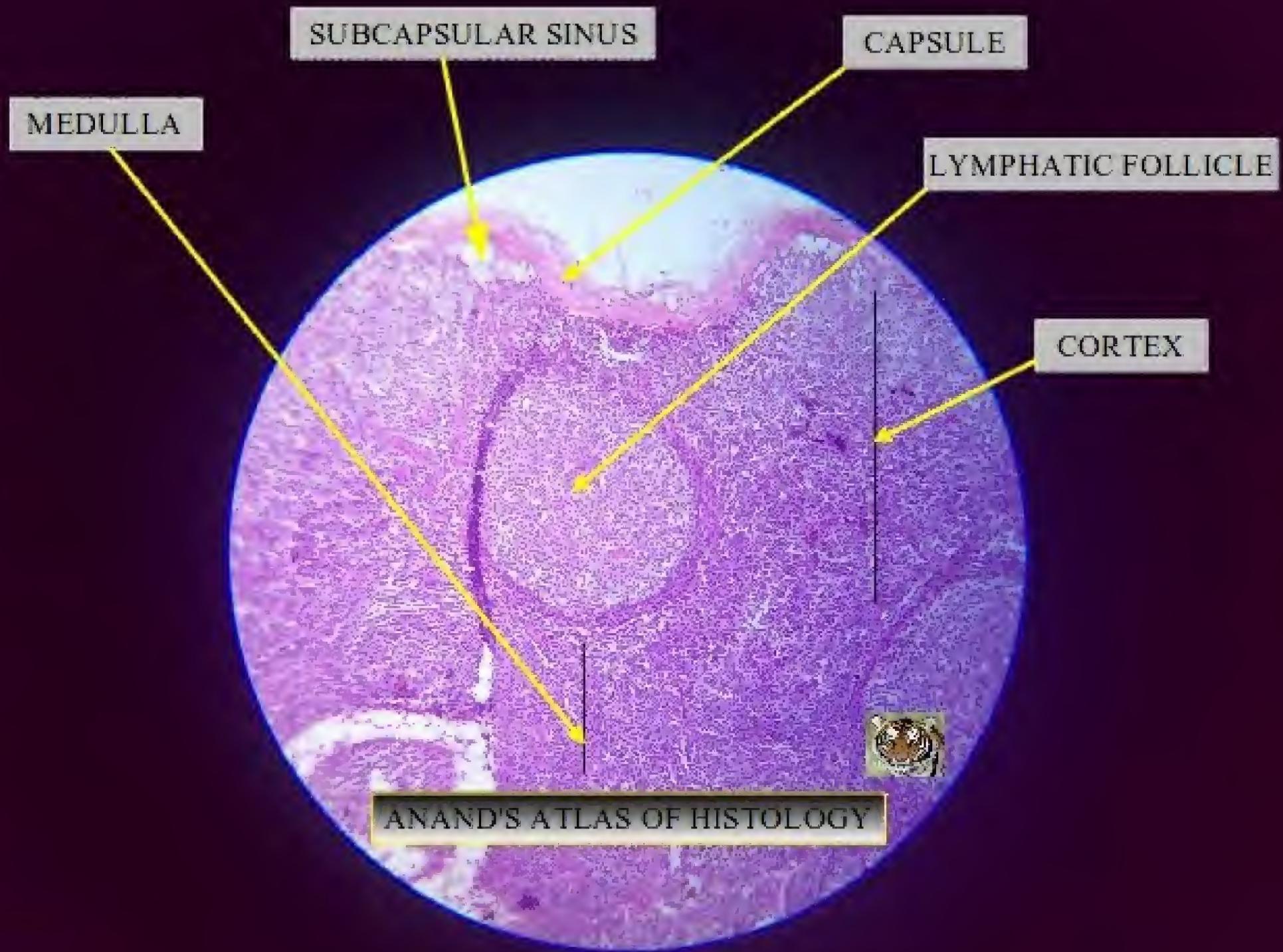
LYMPHATIC SYSTEM

LIST OF COLOUR PLATES

LYMPH NODE
SPLEEN
TONSIL
THYMUS

LYMPH NODE

ANAND'S ATLAS OF HISTOLOGY



MEDULLARY SINUS

GERMINAL CENTRE

ANAND'S ATLAS OF HISTOLOGY

LYMPH NODE

POINTS FOR IDENTIFICATION

- 1. PRESENCE OF CORTEX AND MEDULLA**
- 2. PRESENCE OF LYMPHATIC FOLLICLES**
- 3. MEDULLA IS MADE UP OF LYMPHOCYTES ARRANGED AS MEDULLARY CORDS AND SEPARATED BY MEDULLARY SINUSES**

SPLEEN

ANAND'S ATLAS OF HISTOLOGY

OUTER CAPSULE

WHITE PULP

RED PULP

ANAND'S ATLAS OF HISTOLOGY

RED PULP

WHITE PULP

ANAND'S ATLAS OF HISTOLOGY

SPLEEN

POINTS FOR IDENTIFICATION

- 1. OUTER CAPSULE SENDS IN THICK SEPTAE**
- 2. PRESENCE OF RED PULP**
- 3. PRESENCE OF WHITE PULP**

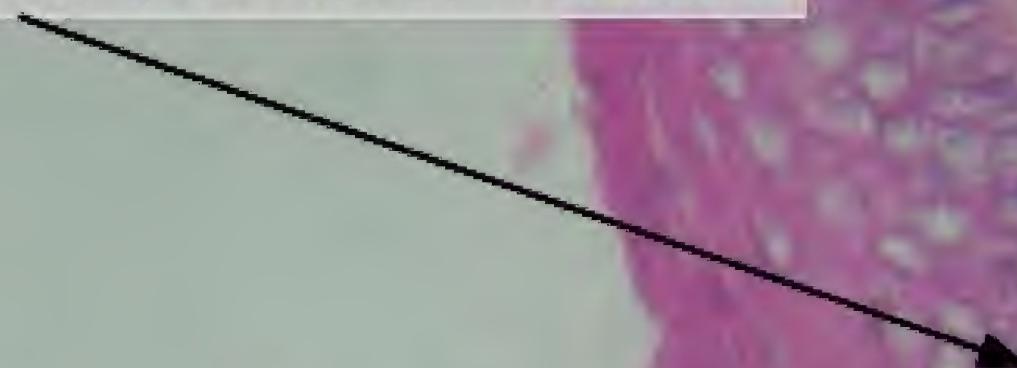
TONSIL

TONSILLAR CRYPT

LYMPHATIC FOLLICLE

ANAND'S ATLAS OF HISTOLOGY

STRATIFIED SQUAMOUS NON KERATINISED EPITHELIUM



TONSIL

POINTS FOR IDENTIFICATION

- 1. SECTION IS OF PALATINE TONSIL**
- 2. IT IS LINED BY STRATIFIED SQUAMOUS
NON KERATINISED EPITHELIUM**
- 3. PRESENCE OF LYMPHATIC FOLLICLE**
- 4. PRESENCE OF TONSILLAR CRYPT**

THYMUS

ANAND'S ATLAS OF HISTOLOGY

THYMIC LOBE

CORTEX

MEDULLA

ANAND'S ATLAS OF HISTOLOGY

LYMPHOCYTES

HASSAL'S CORPUSCLES



ANAND'S ATLAS OF HISTOLOGY

THYMUS

POINTS FOR IDENTIFICATION

1. THYMUS IS DIVIDED INTO LOBES
2. EACH LOBE HAS A CORTEX AND A MEDULLA
3. CORTEX IS PACKED WITH LYMPHOCYTES
4. MEDULLA CONTAINS CORPUSCLES OF HASSAL

DIGESTIVE SYSTEM

LIST OF COLOUR PLATES

TONGUE – FILIFORM PAPILLAE

TONGUE – FUNGIFORM PAPILLAE

TONGUE – CIRCUMVALLATE PAPILLAE

SEROUS SALIVARY GLAND

MUCOUS SALIVARY GLAND

MIXED SALIVARY GLAND

DIGESTIVE SYSTEM

LIST OF COLOUR PLATES

TONGUE – FILIFORM PAPILLAE

TONGUE – FUNGIFORM PAPILLAE

TONGUE – CIRCUMVALLATE PAPILLAE

SEROUS SALIVARY GLAND

MUCOUS SALIVARY GLAND

MIXED SALIVARY GLAND

DIGESTIVE SYSTEM

LIST OF COLOUR PLATES

OESOPHAGUS

STOMACH – FUNDUS

STOMACH – PYLORUS

DUODENUM

JEJUNUM

ILEUM

DIGESTIVE SYSTEM

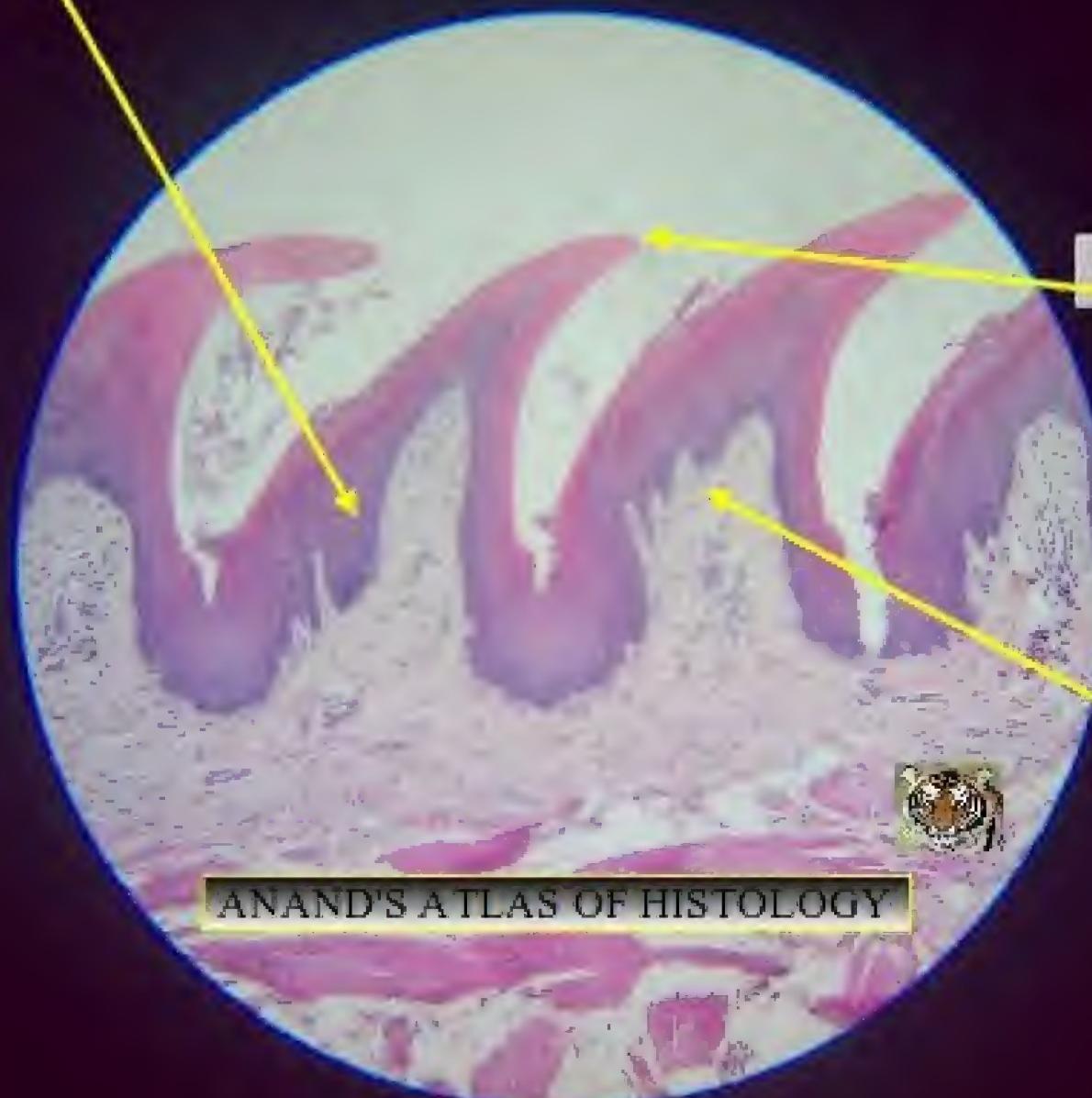
LIST OF COLOUR PLATES

VERMIFORM APPENDIX
LARGE INTESTINE (COLON)
LIVER
GALL BLADDER
PANCREAS

ANAND'S ATLAS OF HISTOLOGY

TONGUE – FILIFORM PAPILLAE

STRATIFIED SQUAMOUS KERATINISED EPITHELIUM



SHARP CONICAL TIP

FILIFORM PAPILLA

TIP IS KERATINISED



ANAND'S ATLAS OF HISTOLOGY

TONGUE – FILIFORM PAPILLAE

POINTS FOR IDENTIFICATION

1. LINED BY STRATIFIED SQUAMOUS KERATINISED EPITHELIUM
2. TIPS ARE KERATINISED
3. SHARP CONICAL APPEARANCE

TONGUE – FUNGIFORM PAPILLA

ANAND'S ATLAS OF HISTOLOGY

STRATIFIED SQUAMOUS NON KERATINISED EPITHELIUM

FILIFORM PAPILLA

FUNGIFORM PAPILLA

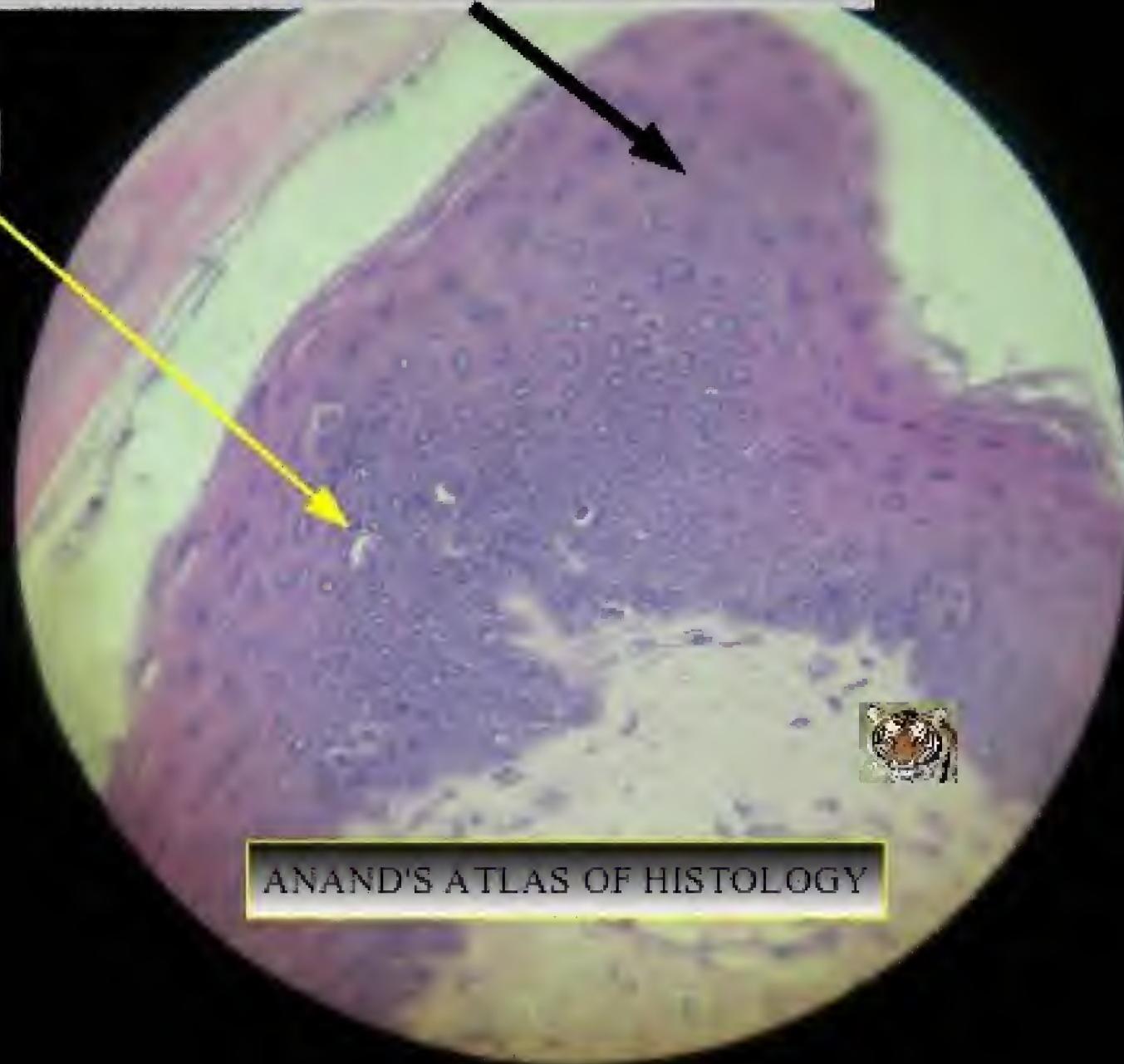
CIRCUMVALLATE PAPILLA



ANAND'S ATLAS OF HISTOLOGY

STRATIFIED SQUAMOUS NON KERATINISED EPITHELIUM

TASTE BUD



ANAND'S ATLAS OF HISTOLOGY

TONGUE – FUNGIFORM PAPILLAE

POINTS FOR IDENTIFICATION

- 1. LINED BY STRATIFIED SQUAMOUS
NON KERATINISED EPITHELIUM**
- 2. PRESENCE OF TASTE BUDS**

STRATIFIED SQUAMOUS KERATINISED EPITHELIUM

TASTE BUD



ANAND'S ATLAS OF HISTOLOGY

FUNGIIFORM PAPILLAE IS USUALLY NON KERATINISED STRATIFIED SQUAMOUS EPITHELIUM. HOWEVER IN SOME CASES THE EPITHELIUM CAN BE KERATINISED AS SHOWN IN THE PICTURE HOWEVER TO DIFFERENTIATE IT FROM FILIFORM PAPILLAE THERE WOULD BE TASTE BUDS

TONGUE - CIRCUMVALLATE PAPILLAE

STRATIFIED SQUAMOUS NON KERATINISED EPITHELIUM

LARGEST OF ALL
TONGUE PAPILLAE



ANAND'S ATLAS OF HISTOLOGY

TASTE BUD

STRATIFIED SQUAMOUS NON KERATINISED EPITHELIUM



ANAND'S ATLAS OF HISTOLOGY

TONGUE – CIRCUMVALLATE PAPILLAE

POINTS FOR IDENTIFICATION

- 1. LINED BY STRATIFIED SQUAMOUS NON KERATINISED EPITHELIUM**
- 2. PRESENCE OF TASTE BUDS**
- 3. LARGEST OF ALL TONGUE PAPILLAE**

SEROUS SALIVARY GLAND

ANAND'S ATLAS OF HISTOLOGY

BLOOD VESSEL

DUCT

SEPTA

ANAND'S ATLAS OF HISTOLOGY

SEROUS ACINI

DUCT

ANAND'S ATLAS OF HISTOLOGY

SEROUS SALIVARY GLAND

POINTS FOR IDENTIFICATION

- 1. SEROUS ACINI ARE PREDOMINANT**
- 2. INTRA LOBULAR DUCTS ARE PRESENT**
- 3. SEROUS CELLS ARE PYRAMIDAL IN SHAPE WITH A BASAL NUCLEUS**

MUCOUS SALIVARY GLAND

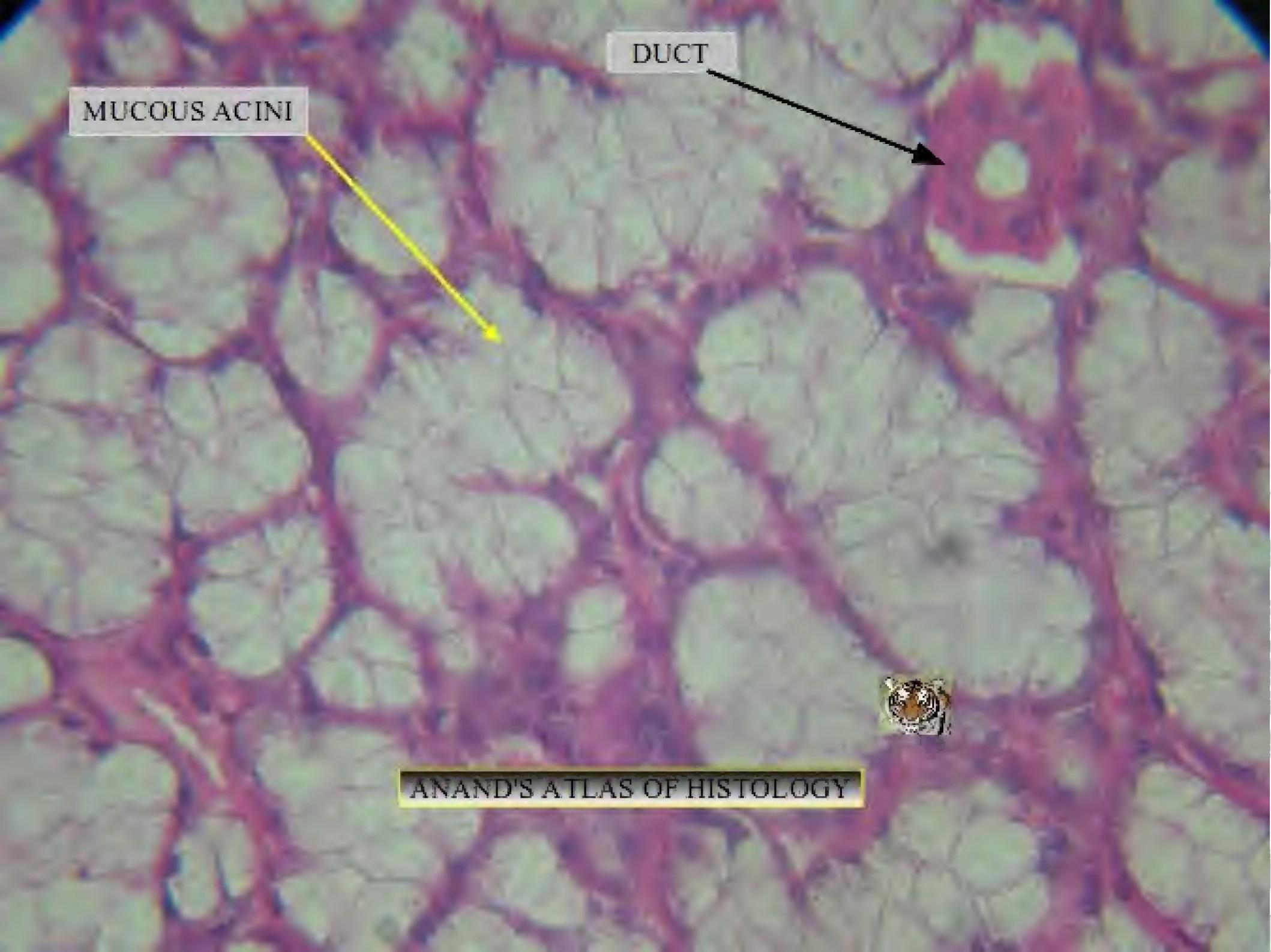
ANAND'S ATLAS OF HISTOLOGY

SEPTA

BLOOD VESSEL

DUCT

ANAND'S ATLAS OF HISTOLOGY



MUCOUS ACINI

DUCT

ANAND'S ATLAS OF HISTOLOGY

MUCOUS SALIVARY GLAND

POINTS FOR IDENTIFICATION

1. MUCOUS ACINI ARE PREDOMINANT
2. INTRALOBULAR DUCTS ARE SEEN
3. MUCOUS ACINI ARE PALE STAINED WITH FLAT BASAL NUCLEUS

MIXED SALIVARY GLAND

ANAND'S ATLAS OF HISTOLOGY

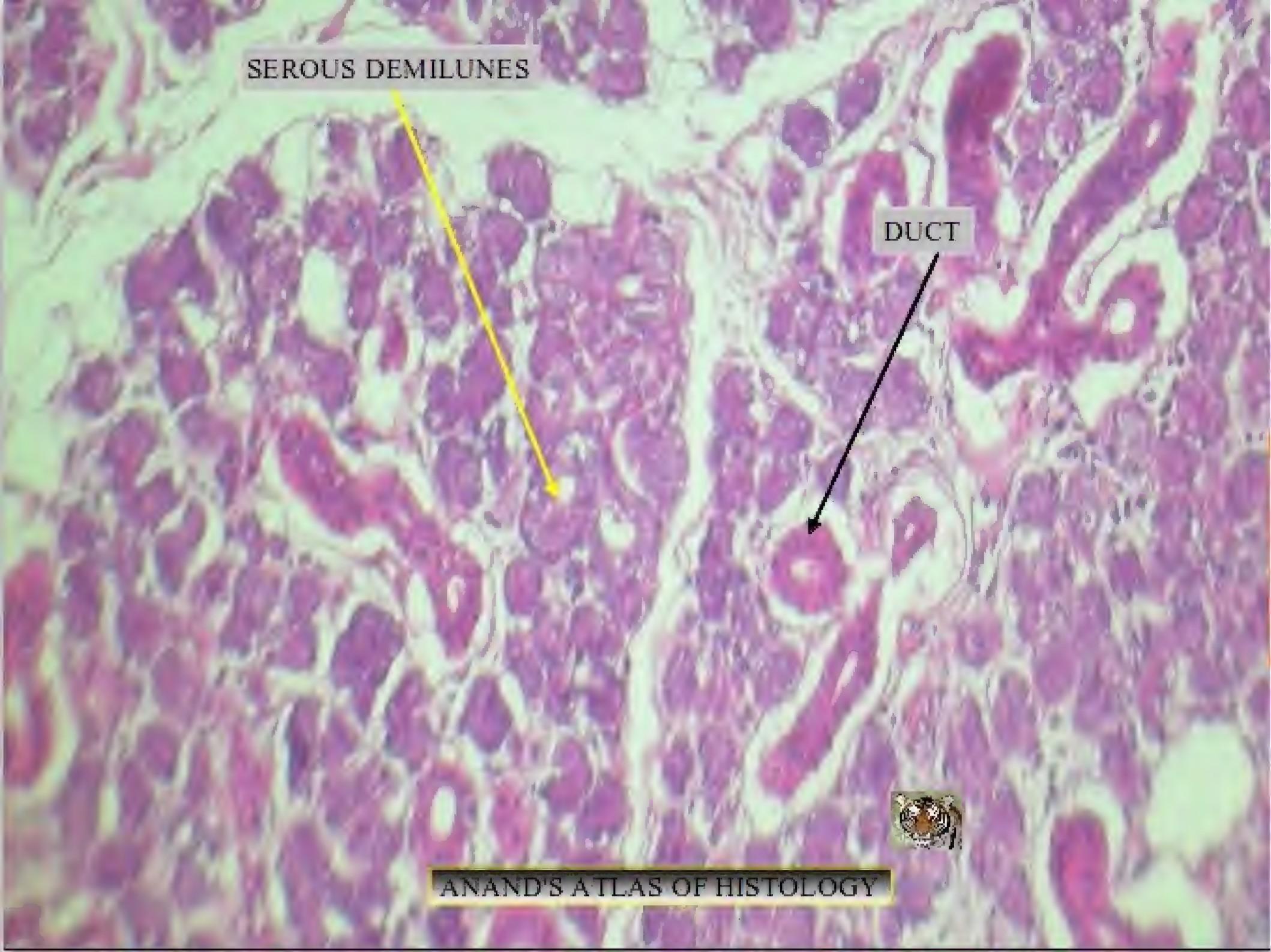
SEPTA

MUCOUS ACINI

SEROUS ACINI



ANAND'S ATLAS OF HISTOLOGY



SEROUS DEMILUNES

DUCT



MIXED SALIVARY GLAND

POINTS FOR IDENTIFICATION

- 1. BOTH SEROUS AND MUCOUS ACINI
ARE PRESENT**
- 2. INTRALOBULAR DUCTS ARE SEEN**
- 3. SEROUS DEMILUNES ARE SEEN**

OESOPHAGUS

ANAND'S ATLAS OF HISTOLOGY

STRATIFIED SQUAMOUS NON KERATINISED EPITHELIUM

SKELETAL MUSCLE

OESOPHAGEAL GLANDS

ANAND'S ATLAS OF HISTOLOGY

STRATIFIED SQUAMOUS NON KERATINISED EPITHELIUM

SKELETAL MUSCLE

ANAND'S ATLAS OF HISTOLOGY

OESOPHAGUS

POINTS FOR IDENTIFICATION

1. LINING EPITHELIUM OF THORACIC PART OF OESOPHAGUS IS STRATIFIED SQUAMOUS NON KERATINISED EPITHELIUM
2. SUBMUCOSA CONTAINS OESOPHAGEAL GLANDS (BOTH SEROUS AND MUCOUS GLANDS)
3. MUSCULAR COAT IS MADE OF SKELETAL MUSCLE IN THE THORACIC PART

STOMACH - FUNDUS

ANAND'S ATLAS OF HISTOLOGY

GASTRIC GLANDS

MUCOSA

MUSCULAR COAT

SUBMUCOSA

GASTRIC PIT

SIMPLE COLUMNAR EPITHELIUM

GASTRIC GLANDS



ANAND'S ATLAS OF HISTOLOGY

STOMACH – FUNDUS

POINTS FOR IDENTIFICATION

- 1. MUCOSA IS THROWN INTO FOLDS AND LINED BY SIMPLE COLUMNAR EPITHELIUM**
- 2. GASTRIC GLANDS ARE LONG WHEREAS THE GASTRIC PITS ARE SHALLOW**
- 3. GASTRIC GLANDS OPEN INTO THE GASTRIC PITS**

STOMACH - PYLORUS

ANAND'S ATLAS OF HISTOLOGY

PYLORIC GLANDS

GASTRIC FOLDS

SUBMUCOSA

ANAND'S ATLAS OF HISTOLOGY

PYLORIC GLANDS

GASTRIC PIT

SIMPLE COLUMNAR EPITHELIUM

ANAND'S ATLAS OF HISTOLOGY

STOMACH – PYLORUS

POINTS FOR IDENTIFICATION

- 1. GASTRIC FOLDS ARE LONG AND NARROW**
- 2. PYLORIC GLANDS ARE SHORTER AND OPEN
INTO THE GASTRIC PITS**
- 3. MUCOSA IS LINED BY SIMPLE COLUMNAR
EPITHELIUM**

DUODENUM

ANAND'S ATLAS OF HISTOLOGY

VILLUS

MUCOSA

MUSCULAR COAT

SUBMUCOSA

ANAND'S ATLAS OF HISTOLOGY

BRUNNER'S GLANDS
IN SUBMUCOSA

MUSCULARIS INTERNA

DUODENUM

POINTS FOR IDENTIFICATION

- 1. MUCOSAL FOLDS ARE TERMED AS VILLI**
- 2. VILLI ARE LONG AND NUMEROUS**
- 3. BRUNNER'S GLANDS ARE SEEN IN SUBMUCOSA**

JEJUNUM

ANAND'S ATLAS OF HISTOLOGY

VILLI

MUCOSA

MUSCULAR COAT

SUBMUCOSA

ANAND'S ATLAS OF HISTOLOGY

GOBLET CELL

MICROVILLI

ANAND'S ATLAS OF HISTOLOGY

JEJUNUM

POINTS FOR IDENTIFICATION

- 1. MUCOSA CONTAINS NUMEROUS GOBLET CELLS**
- 2. MICROVILLI ARE PRESENT IN THE LINING EPITHELIUM**
- 3. VILLI ARE LONG AND PROMINENT**

ILEUM

ANAND'S ATLAS OF HISTOLOGY

PEYER'S PATCHES

MUCOSA

MUSCULAR COAT

SUBMUCOSA

ANAND'S ATLAS OF HISTOLOGY

GOBLET CELL

MUCOSA

LYMPHOCYTE

ANAND'S ATLAS OF HISTOLOGY

ILEUM

POINTS FOR IDENTIFICATION

1. VILLI ARE SHORT AND FEW
2. SUB MUCOSA CONTAINS LYMPHATIC AGGREGATIONS CALLED AS PEYER'S PATCHES

VERMIFORM APPENDIX

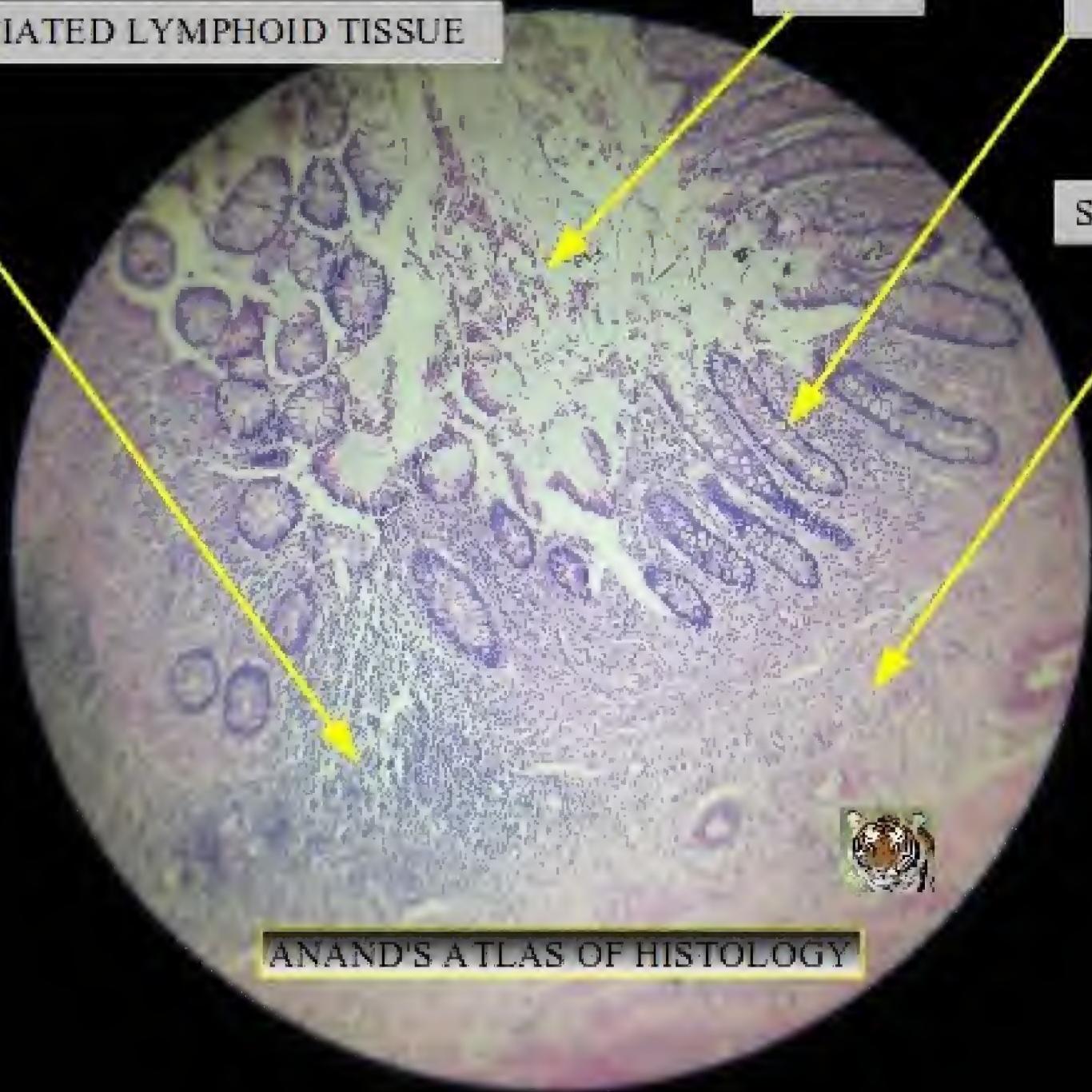
ANAND'S ATLAS OF HISTOLOGY

GUT ASSOCIATED LYMPHOID TISSUE

LUMEN

MUCOSA

SUB MUCOSA

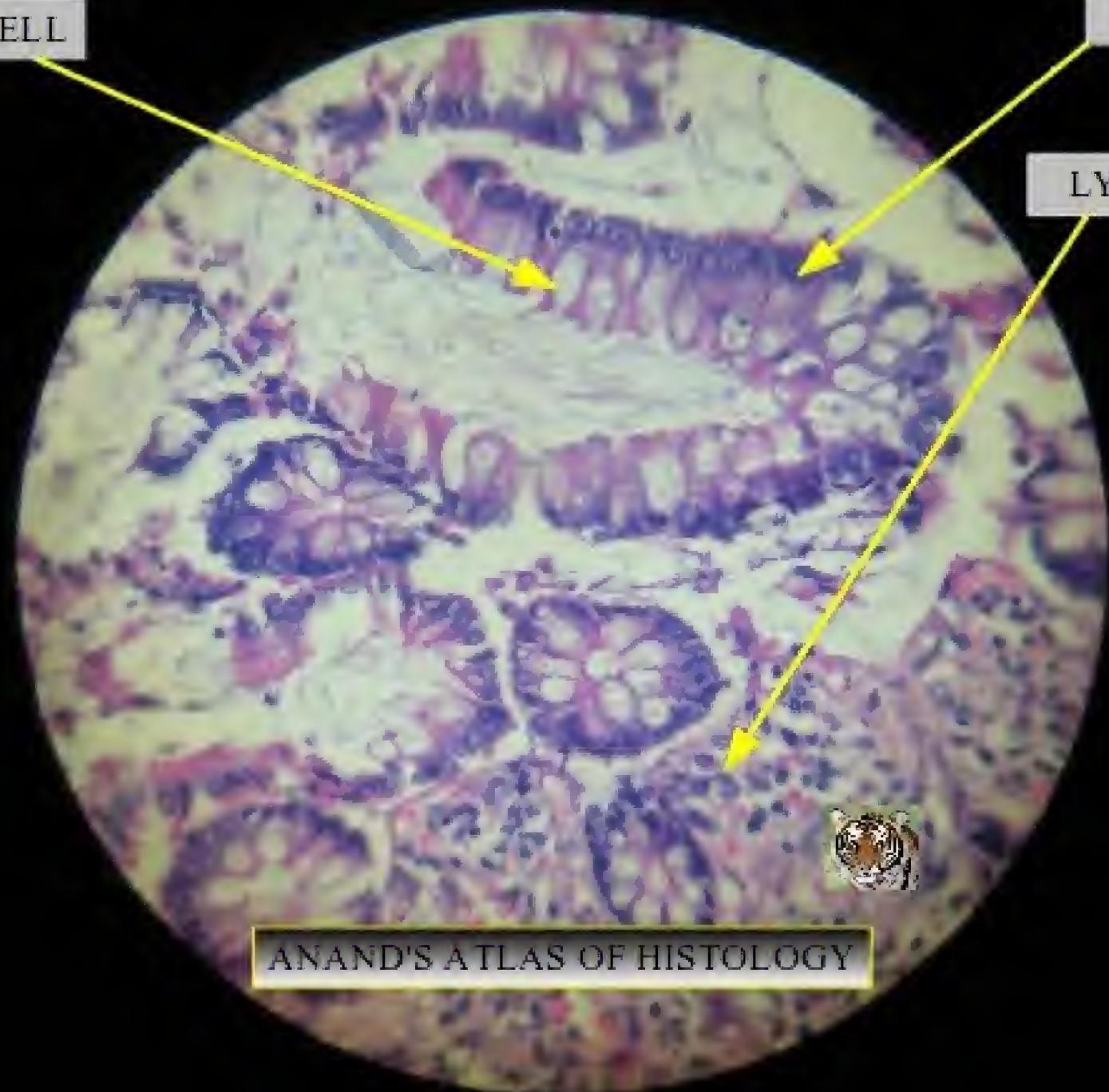


ANAND'S ATLAS OF HISTOLOGY

GOBLET CELL

MUCOSA

LYMPHOCYTES



ANAND'S ATLAS OF HISTOLOGY

VERMIFORM APPENDIX

POINTS FOR IDENTIFICATION

- 1. MUCOSA IS LINED BY SIMPLE COLUMNAR EPITHELIUM**
- 2. SUBMUCOSA CONTAINS LYMPHOID AGGREGATIONS**
- 3. GOBLET CELLS ARE SEEN**

LARGE INTESTINE (COLON)

ANAND'S ATLAS OF HISTOLOGY

MUSCULAR COAT

MUCOSA

SUB MUCOSA



ANAND'S ATLAS OF HISTOLOGY

GOBLET CELL

MUCOSA



LARGE INTESTINE (COLON)

POINTS FOR IDENTIFICATION

1. MUCOSA IS THROWN INTO FOLDS AND CONTAINS NUMEROUS GOBLET CELLS
2. MUCOSA IS LINED BY SIMPLE COLUMNAR EPITHELIUM
3. MUSCULAR COAT IS THICK AND ARRANGED AS THREE LAYERS

LIVER

ANAND'S ATLAS OF HISTOLOGY

CENTRAL VEIN

HEPATOCYTES

SINUSOID



ANAND'S ATLAS OF HISTOLOGY

PORTAL TRIAD

HEPATOCYTES



ANAND'S ATLAS OF HISTOLOGY

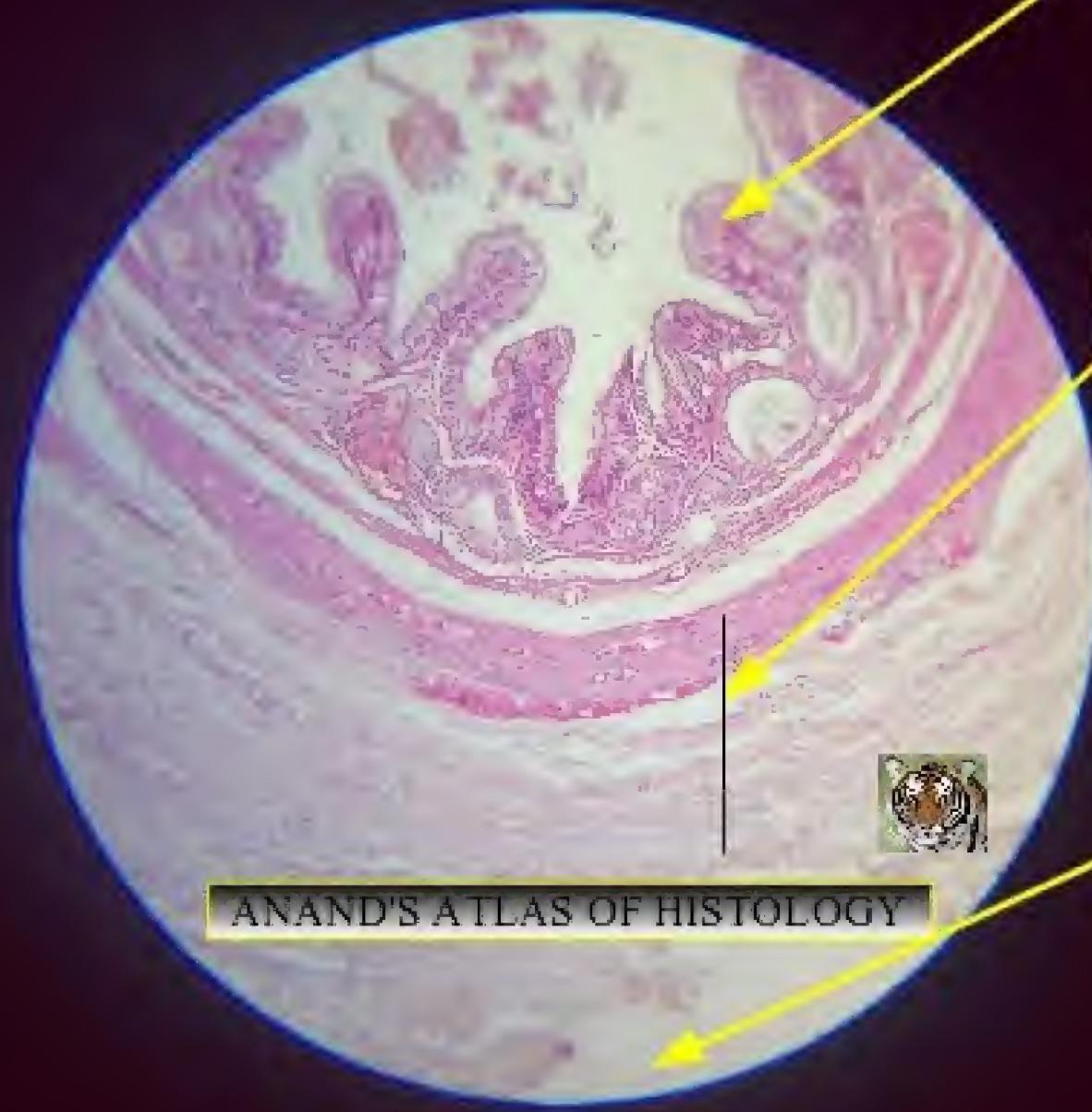
LIVER

POINTS FOR IDENTIFICATION

1. HEPATOCYTES ARRANGED IN ROWS
RADIATE IN ALL DIRECTIONS FROM THE
CENTRAL VEIN
2. SINUSOIDS ARE PRESENT BETWEEN
ADJACENT ROWS OF HEPATOCYTES
3. PRESENCE OF PORTAL TRIAD

GALL BLADDER

ANAND'S ATLAS OF HISTOLOGY



MUCOSA

FIBROMUSCULAR
COAT

SEROSAL COAT

ANAND'S ATLAS OF HISTOLOGY

MUCOSA

MICROVILLI

TALL COLUMNAR
EPITHELIUM



GALL BLADDER

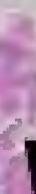
POINTS FOR IDENTIFICATION

- 1. MUCOSA IS LINED BY TALL COLUMNAR CELLS WITH MICROVILLI**
- 2. FIBROMUSCULAR COAT IS MADE OF COLLAGEN FIBRES, SMOOTH MUSCLE FIBRES AND ELASTIC FIBRES**

PANCREAS

ANAND'S ATLAS OF HISTOLOGY

CENTROACINAR CELLS



PANCREATIC ISLET



ANAND'S ATLAS OF HISTOLOGY

CENTROACINAR CELLS

ISLET OF LANGERHANS



ANAND'S ATLAS OF HISTOLOGY

PANCREAS

POINTS FOR IDENTIFICATION

1. EXOCRINE PART SHOWS
CENTROACINAR CELLS AND DUCTS
2. ENDOCRINE PART SHOWS ISLETS
OF LANGERHANS

RESPIRATORY SYSTEM

LIST OF COLOUR PLATES

TRACHEA

LUNG

TRACHEA

ANAND'S ATLAS OF HISTOLOGY

MUCOSA

SUBMUCOSA

HYALINE CARTILAGE



ANAND'S ATLAS OF HISTOLOGY

PSEUDOSTRATIFIED CILIATED COLUMNAR EPITHELIUM



TRACHEAL GLANDS



ANAND'S ATLAS OF HISTOLOGY

TRACHEA

POINTS FOR IDENTIFICATION

1. MUCOSA IS LINED BY PSEUDOSTRATIFIED CILIATED COLUMNAR EPITHELIUM
2. PRESENCE OF TRACHEAL GLANDS
3. PRESENCE OF HYALINE CARTILAGE

LUNG

ANAND'S ATLAS OF HISTOLOGY

BRONCHIOLE

ALVEOLUS

ANAND'S ATLAS OF HISTOLOGY

SIMPLE SQUAMOUS EPITHELIUM
(ENDOTHELIUM)

ALVEOLUS

ANAND'S ATLAS OF HISTOLOGY

LUNG

POINTS FOR IDENTIFICATION

1. PRESENCE OF ALVEOLI
2. ALVEOLI ARE LINED BY SIMPLE SQUAMOUS EPITHELIUM
3. PRESENCE OF ALVEOLAR DUCTS AND ALVEOLAR SACS

EXCRETORY SYSTEM

LIST OF COLOUR PLATES

**KIDNEY
URETER
URINARY BLADDER**

KIDNEY

ANAND'S ATLAS OF HISTOLOGY

CUT SECTIONS OF PROXIMAL CONVOLUTED TUBULE

RENAL CORTEX

GLOMERULUS

CUT SECTIONS OF DISTAL CONVOLUTED TUBULE

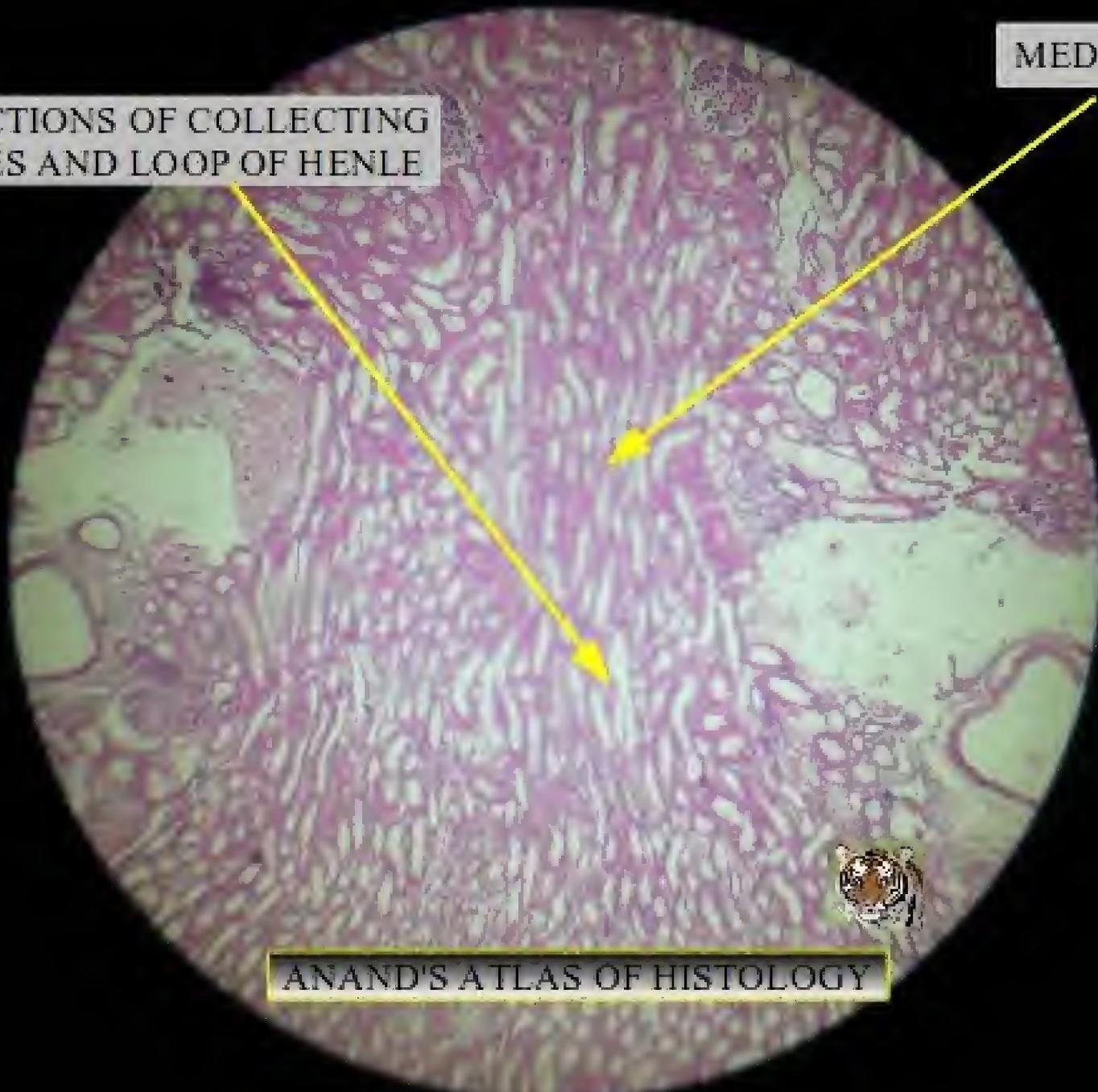
ANAND'S ATLAS OF HISTOLOGY



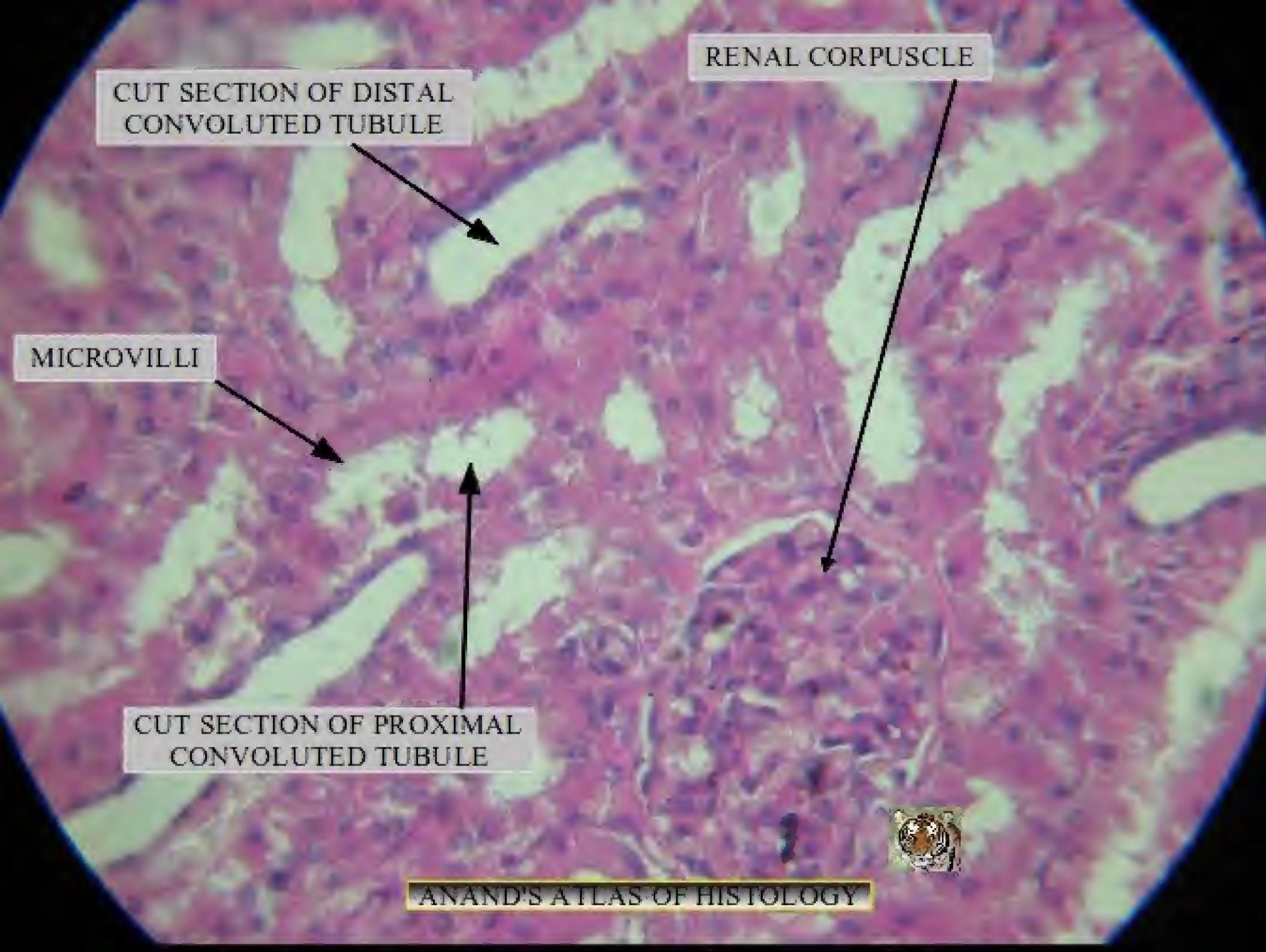
RENAL MEDULLA

MEDULLARY RAYS

CUT SECTIONS OF COLLECTING
TUBULES AND LOOP OF HENLE



ANAND'S ATLAS OF HISTOLOGY



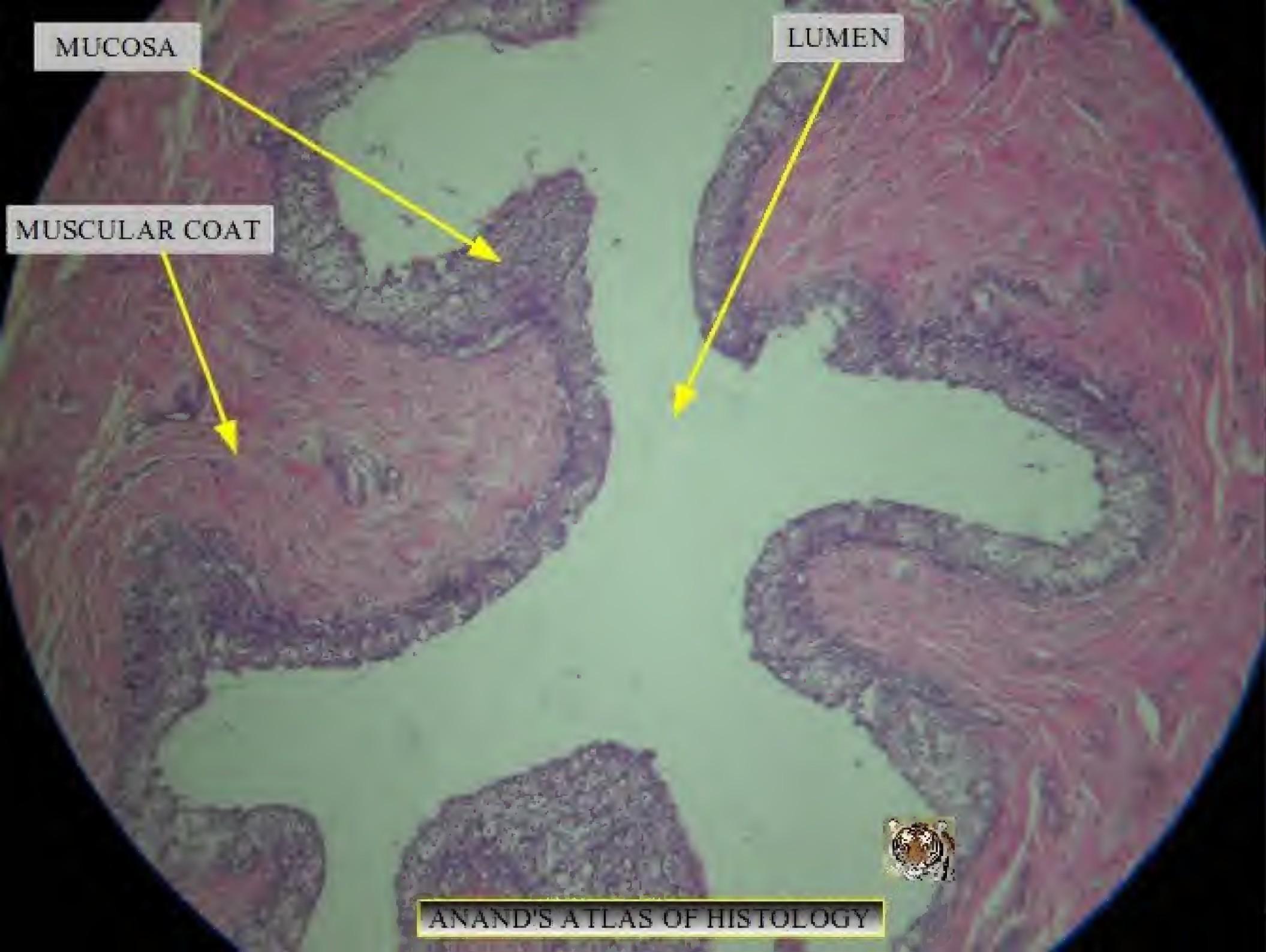
KIDNEY

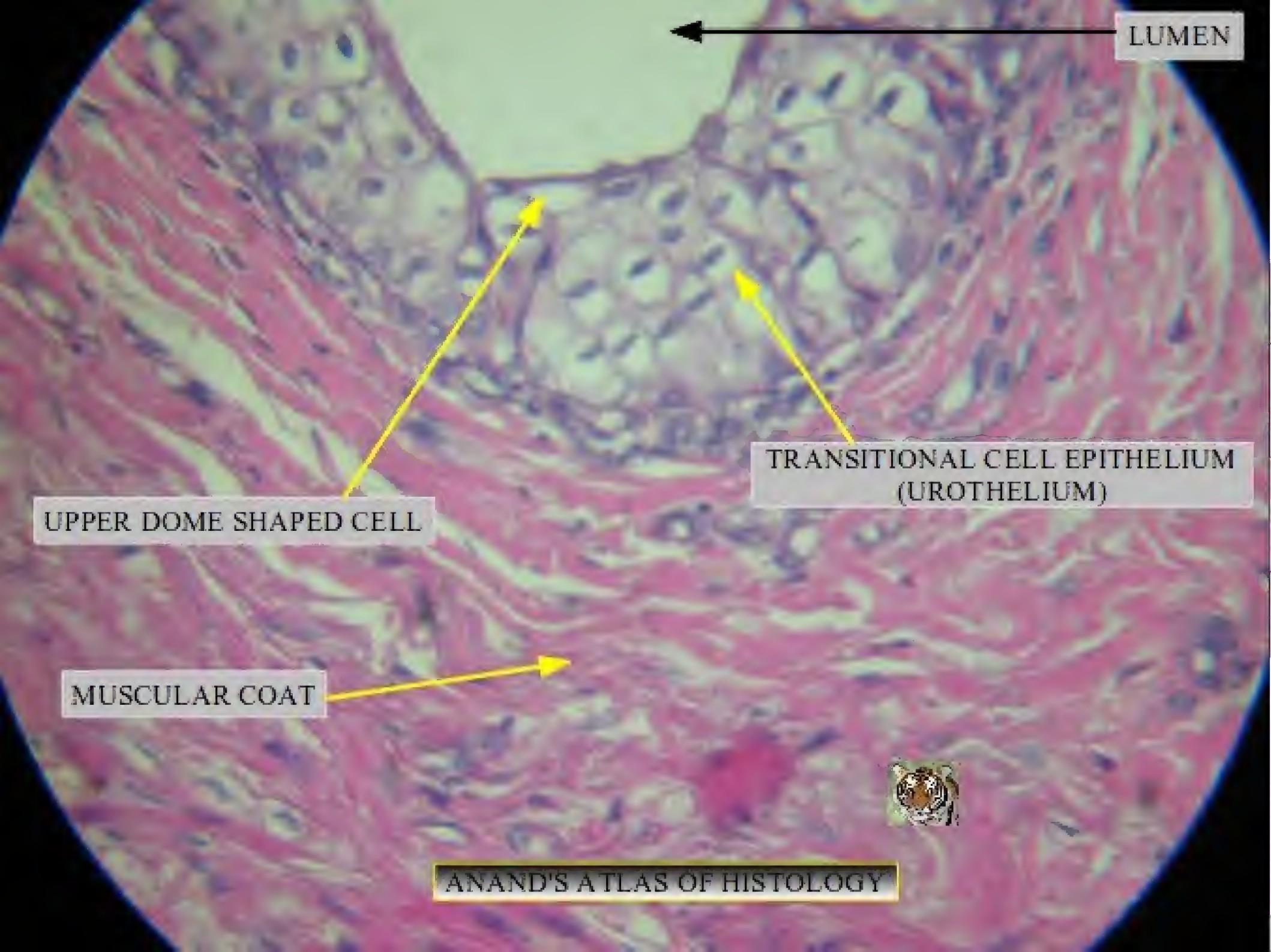
POINTS FOR IDENTIFICATION

1. CUT SECTION OF KIDNEY SHOWS RENAL CORTEX AND
RENAL MEDULLA
2. RENAL CORTEX SHOWS CUT SECTIONS OF RENAL
CORPUSCLES, PROXIMAL AND DISTAL CONVOLUTED
TUBULES
3. RENAL MEDULLA SHOWS CUT SECTIONS OF
COLLECTING DUCTS PROJECTING INTO THE CORTEX AS
MEDULLARY RAYS

URETER

ANAND'S ATLAS OF HISTOLOGY





LUMEN

UPPER DOME SHAPED CELL

TRANSITIONAL CELL EPITHELIUM
(UROTHELIUM)

MUSCULAR COAT

ANAND'S ATLAS OF HISTOLOGY

URETER

POINTS FOR IDENTIFICATION

1. MUCOSA IS THROWN INTO FOLDS
2. MUCOSA IS LINED BY TRANSITIONAL CELL EPITHELIUM
3. MUSCULAR COAT IS MADE OF THREE LAYERS

URINARY BLADDER

ANAND'S ATLAS OF HISTOLOGY

TRANSITIONAL CELL EPITHELIUM
(UROTHELIUM)

MUSCULAR COAT

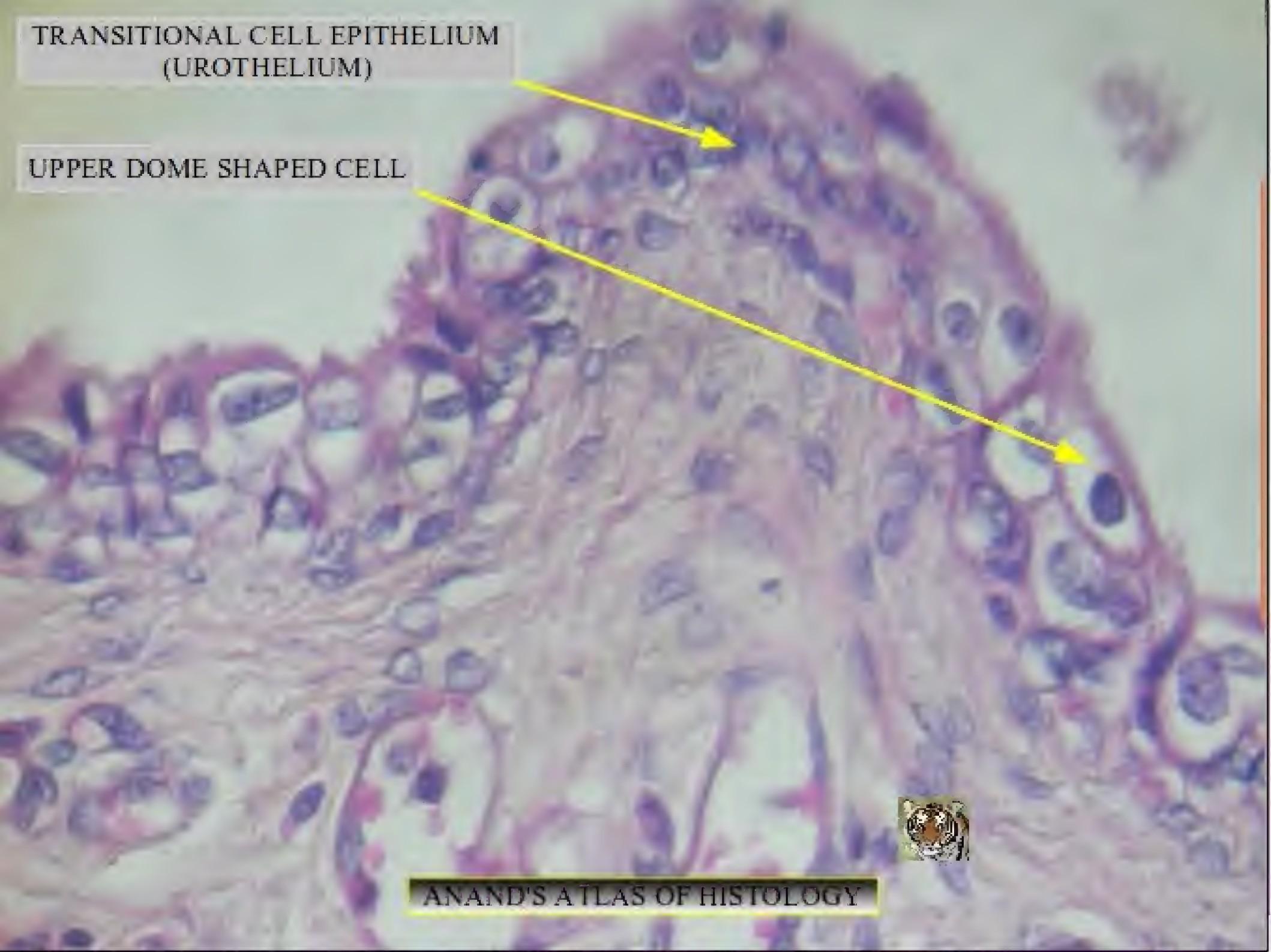
MUCOSA



ANAND'S ATLAS OF HISTOLOGY

TRANSITIONAL CELL EPITHELIUM
(UROTHELIUM)

UPPER DOME SHAPED CELL



URINARY BLADDER

POINTS FOR IDENTIFICATION

- 1. MUCOSA IS THROWN INTO FOLDS.**
- 2. MUCOSA IS LINED BY TRANSITIONAL CELL EPITHELIUM**
- 3. MUSCULAR COAT IS VERY THICK AND IS THREE LAYERED, INNER AND OUTER LONGITUDINAL AND MIDDLE CIRCULAR LAYERS**

REPRODUCTIVE SYSTEM – MALE

LIST OF COLOUR PLATES

TESTIS
EPIDIDYMIS
VAS DEFERENS
PROSTATE GLAND
SEMINAL VESICLE

TESTIS

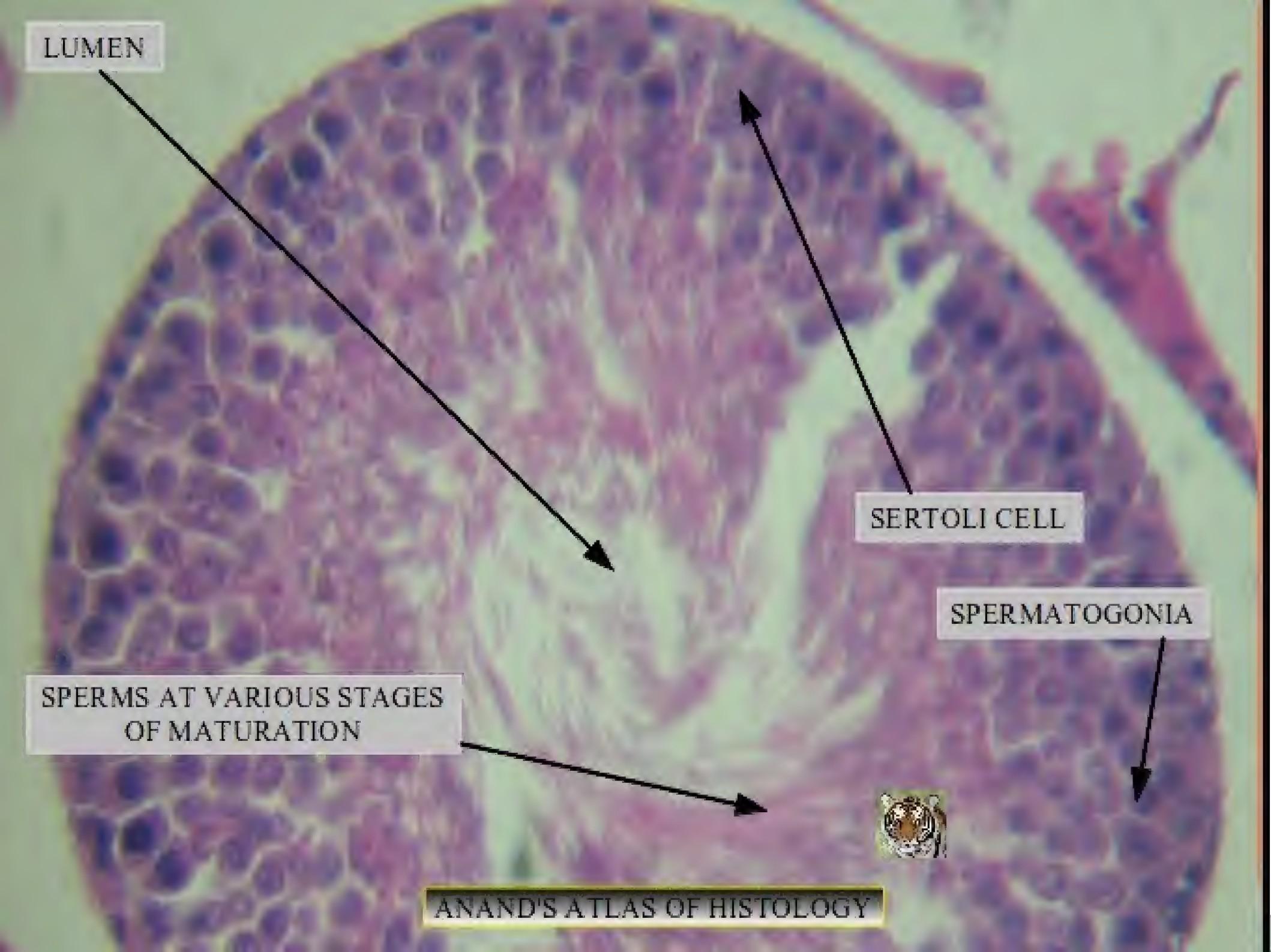
ANAND'S ATLAS OF HISTOLOGY

CUT SECTIONS OF
SEMINIFEROUS TUBULES

SPERMS AT VARIOUS
STAGES OF MATURATION



ANAND'S ATLAS OF HISTOLOGY



LUMEN

SERTOLI CELL

SPERMATOGONIA

SPERMS AT VARIOUS STAGES
OF MATURATION

TESTIS

POINTS FOR IDENTIFICATION

1. CUT SECTIONS OF SEMINIFEROUS TUBULES ARE
SEEN
2. SPERMS AT VARIOUS STAGES OF MATURATION
CAN BE SEEN IN THE LUMEN
3. SERTOLI CELLS WHICH PROVIDE NOURISHMENT
TO DEVELOPING SPERM IS ALSO SEEN

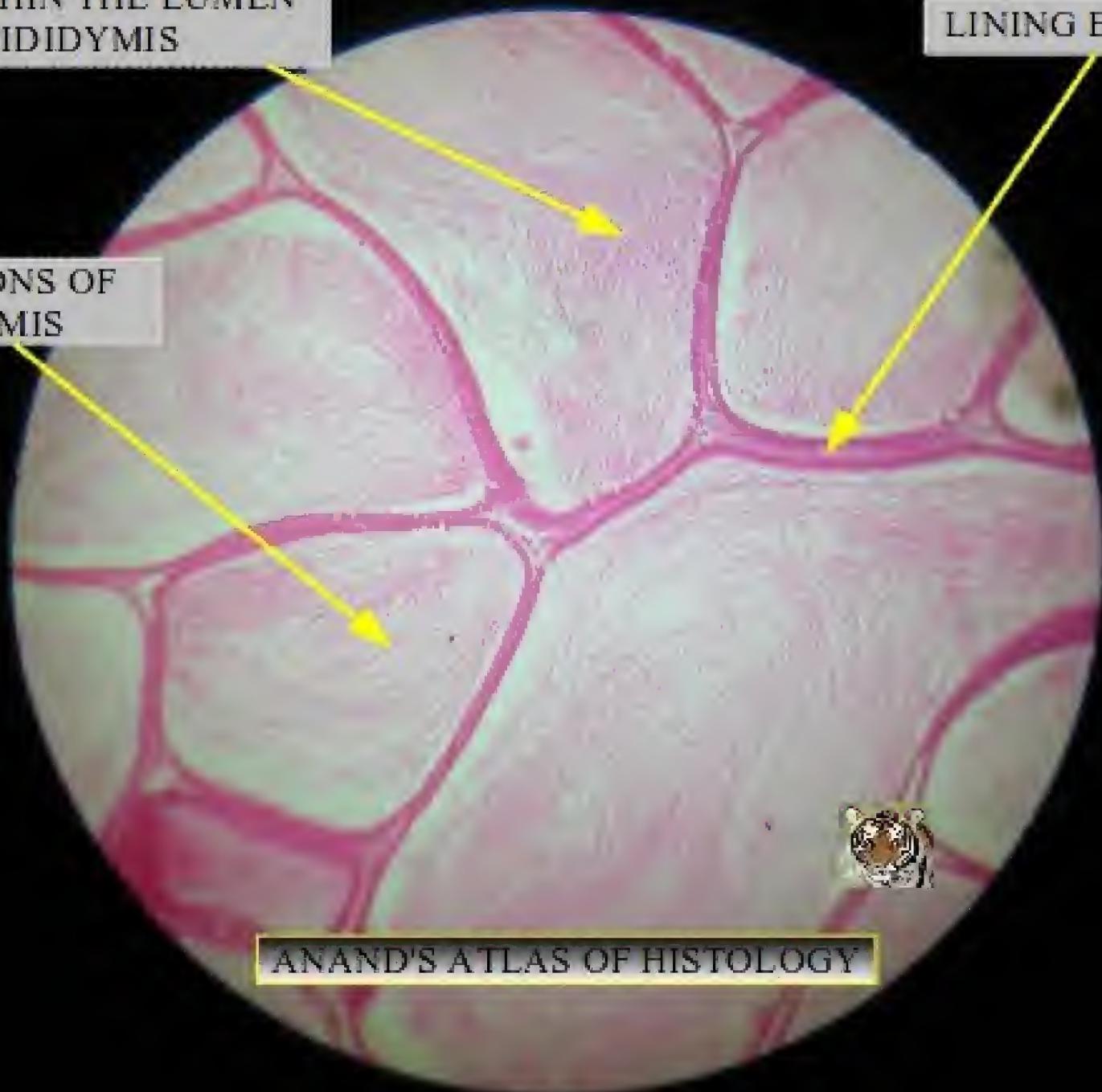
EPIDIDYMIS

ANAND'S ATLAS OF HISTOLOGY

SPERMS WITHIN THE LUMEN
OF EPIDIDYMIS

LINING EPITHELIUM

CUT SECTIONS OF
EPIDIDYMIS



ANAND'S ATLAS OF HISTOLOGY

PSEUDOSTRATIFIED
COLUMNAR EPITHELIUM

STEREOCILIA



SPERMS

EPIDIDYMIS

POINTS FOR IDENTIFICATION

- 1. CUT SECTIONS OF EPIDIDYMIS ARE SEEN**
- 2. SPERMS CAN BE SEEN IN THE LUMEN**
- 3. LINING EPITHELIUM IS PSEUDOSTRATIFIED
COLUMNAR WITH APICAL MICROVILLI TERMED AS
STEREOCILIA**

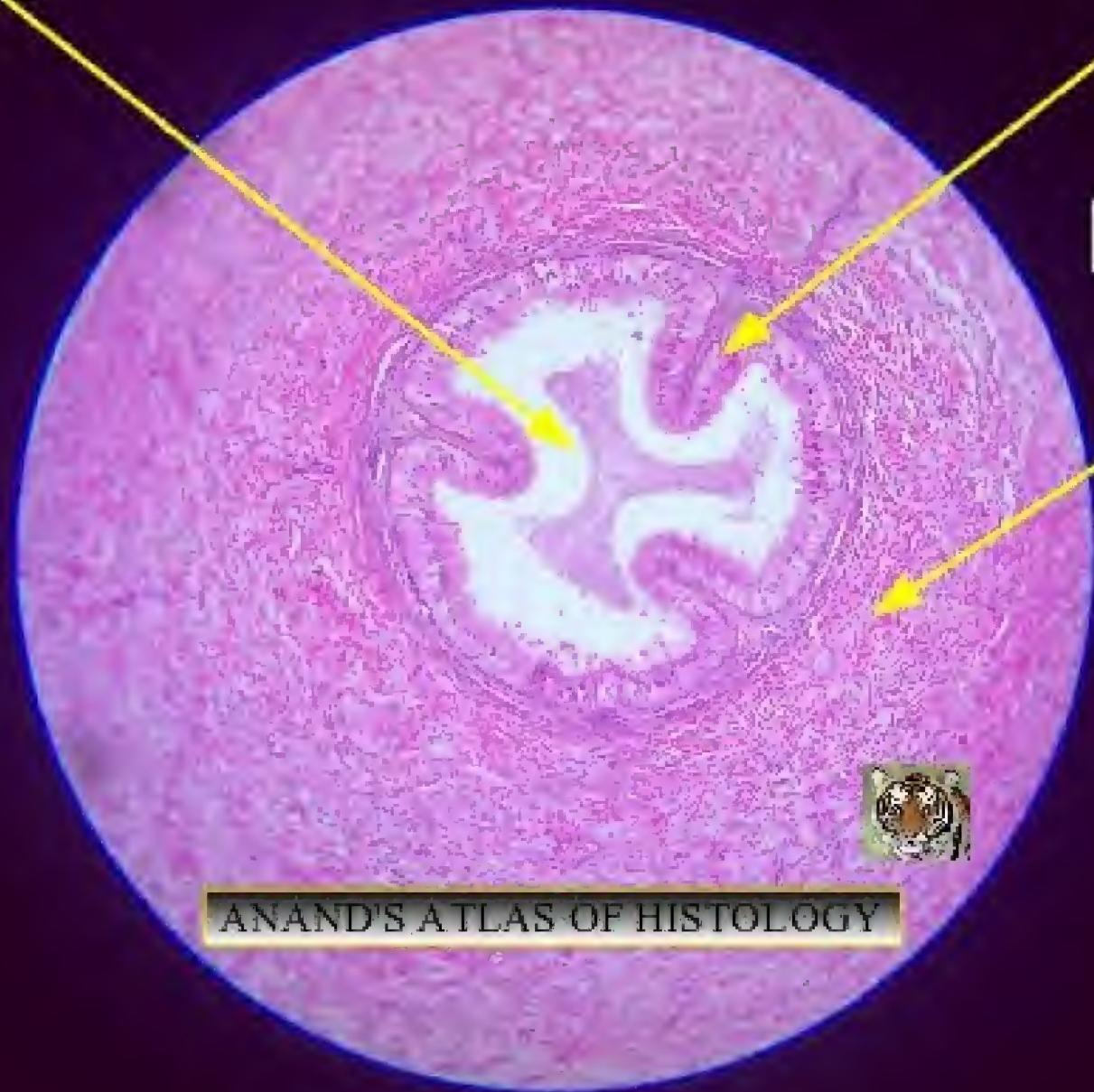
VAS DEFERENS

ANAND'S ATLAS OF HISTOLOGY

LUMEN

MUCOSA

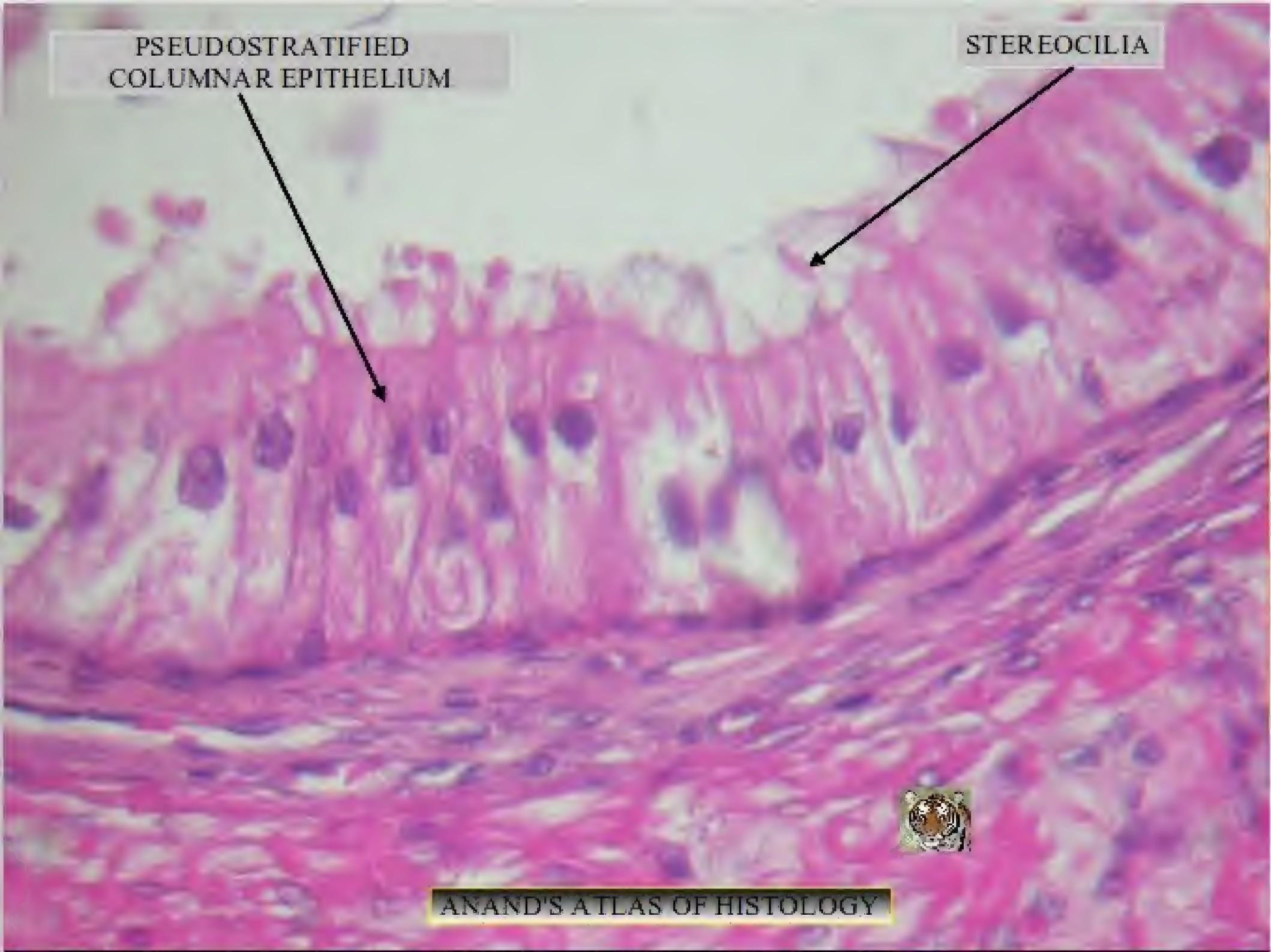
MUSCULAR COAT



ANAND'S ATLAS OF HISTOLOGY

PSEUDOSTRATIFIED
COLUMNAR EPITHELIUM

STEREOCILIA



VAS DEFERENS

POINTS FOR IDENTIFICATION

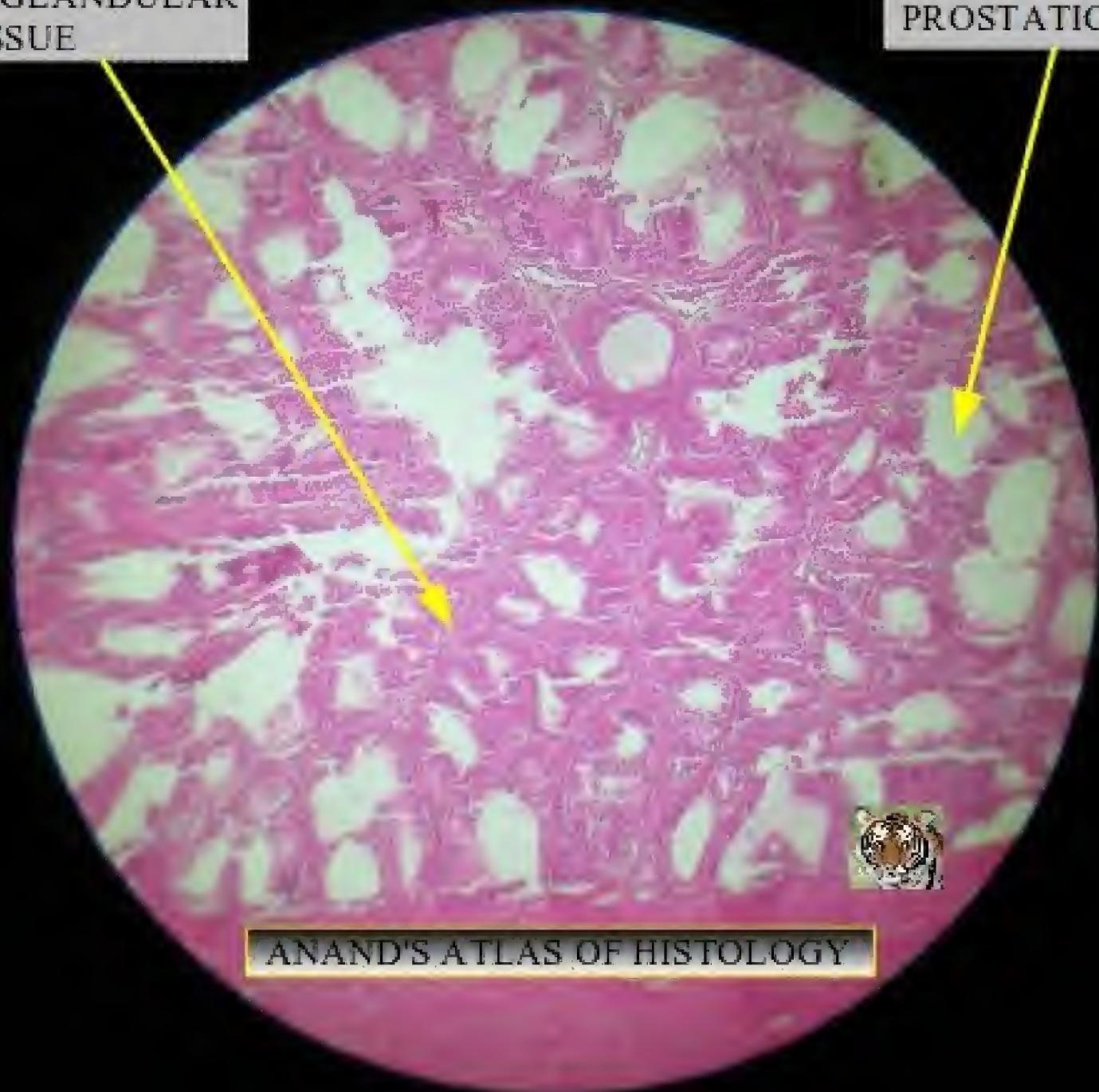
- 1. MUCOSA IS THROWN INTO FOLDS**
- 2. LINED BY PSEUDOSTRATIFIED
COLUMNAR EPITHELIUM WITH
STEREOCILIA**
- 3. MUSCULAR COAT IS THICK**

PROSTATE GLAND

ANAND'S ATLAS OF HISTOLOGY

PROSTATIC GLANDULAR
TISSUE

PROSTATIC FOLLICLE



ANAND'S ATLAS OF HISTOLOGY

PSEUDOSTRATIFIED EPITHELIUM

MUSCULAR STROMA

COLLOID AMYLOID BODIES



PROSTATE GLAND

POINTS FOR IDENTIFICATION

1. PROSTATIC FOLLICLES ARE SEEN IN GLANDULAR TISSUE
2. FOLLICLES ARE EMBEDDED IN A FIBROMUSCULAR STROMA
3. AMYLOID MATERIAL IS SEEN WITHIN THE FOLLICLE
4. FOLLICLE IS LAYERED BY PSEUDOSTRATIFIED EPITHELIUM OCCASIONALLY EPITHELIUM CAN BE BILAYERED

SEMINAL VESICLE

ANAND'S ATLAS OF HISTOLOGY

DIVERTICULAE

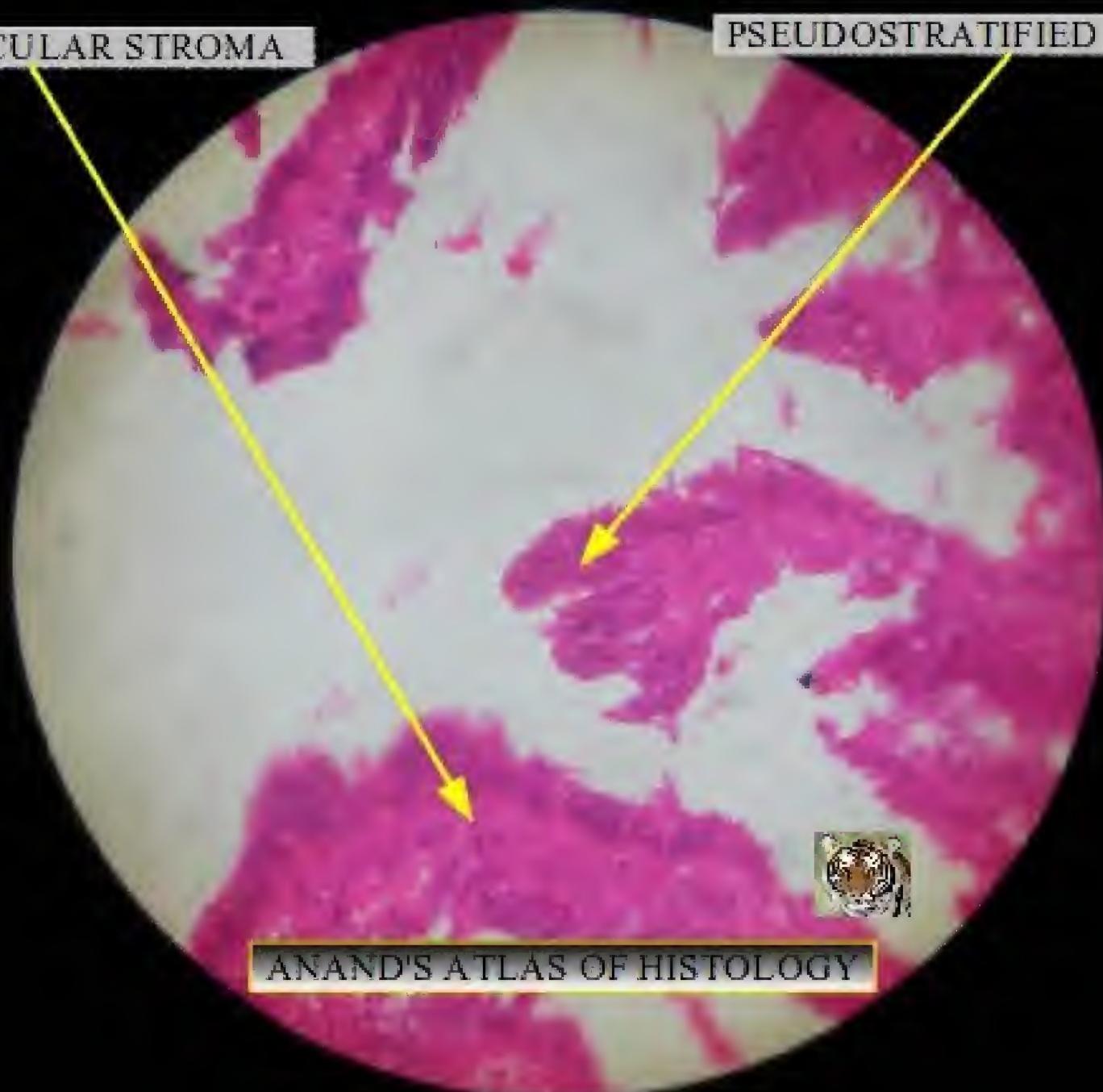
LUMEN



ANAND'S ATLAS OF HISTOLOGY

FIBRO MUSCULAR STROMA

PSEUDOSTRATIFIED EPITHELIUM



ANAND'S ATLAS OF HISTOLOGY

SEMINAL VESICLE

POINTS FOR IDENTIFICATION

1. TUBULAR APPEARANCE WITH PRESENCE OF DIVERTICULAE
2. DIVERTICULAE ARE LINED BY PSEUDOSTRATIFIED EPITHELIUM
3. PRESENCE OF LUMEN

REPRODUCTIVE SYSTEM – FEMALE

LIST OF COLOUR PLATES

UTERUS
FALLOPIAN TUBE
OVARY
MAMMARY GLAND
PLACENTA

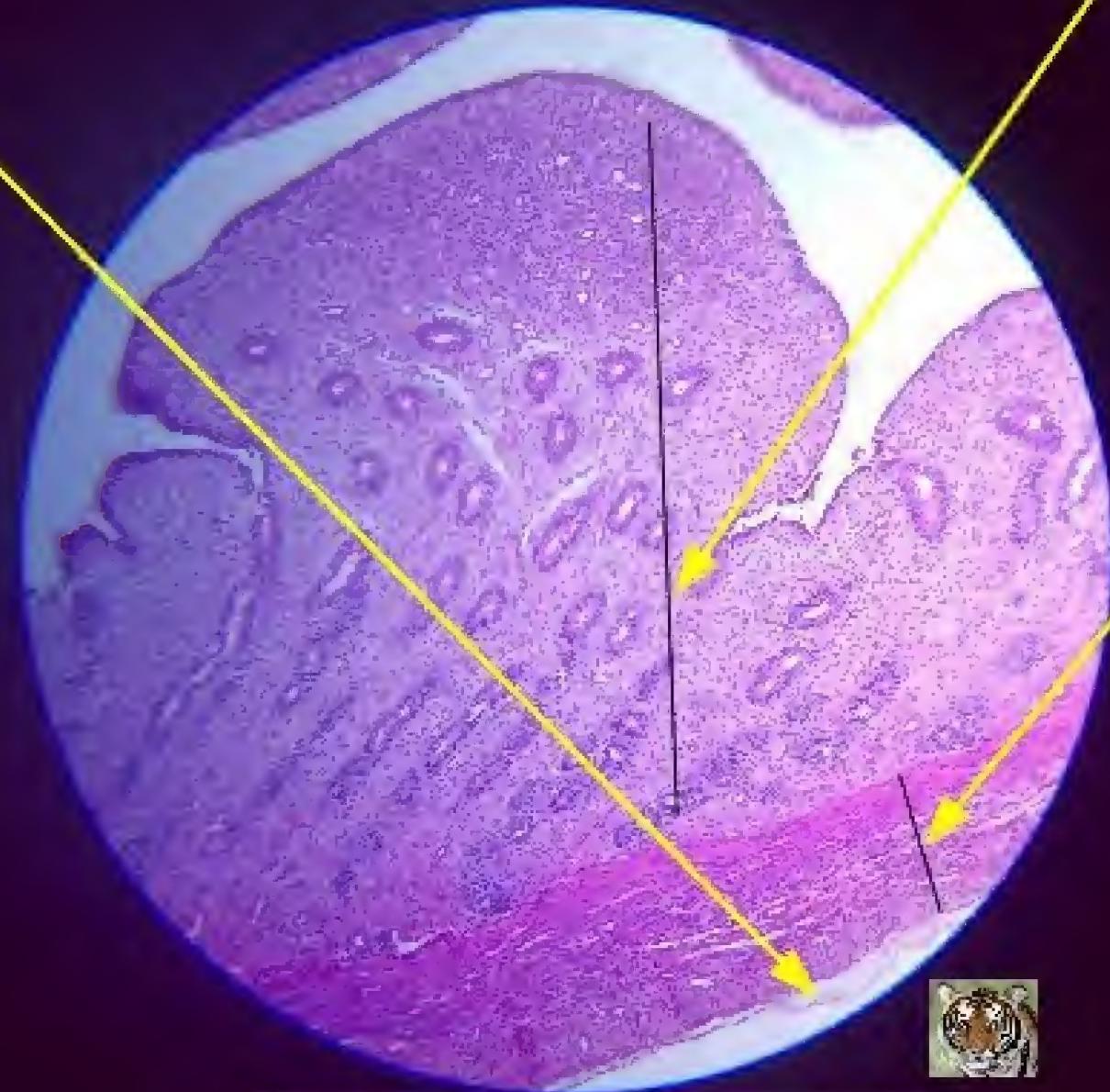
UTERUS

ANAND'S ATLAS OF HISTOLOGY

PERIMETRIUM

ENDOMETRIUM

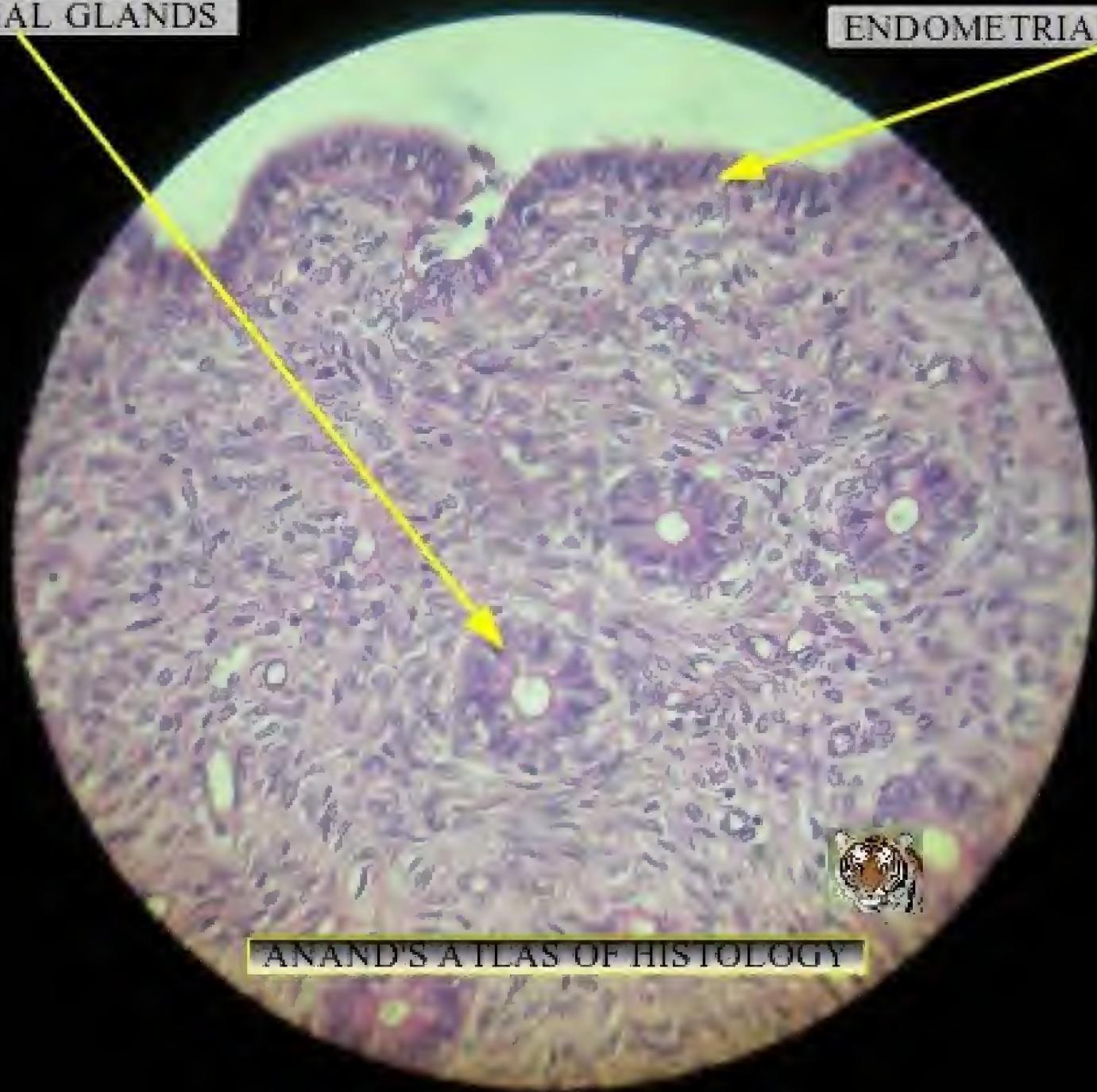
MYOMETRIUM



ANAND'S ATLAS OF HISTOLOGY

ENDOMETRIAL GLANDS

ENDOMETRIAL EPITHELIUM



ANAND'S ATLAS OF HISTOLOGY

UTERUS

POINTS FOR IDENTIFICATION

- 1. UTERINE WALL IS MADE OF THREE LAYERS
FROM INSIDE TO OUTSIDE ENDOMETRIUM,
MYOMETRIUM AND PERIMETRIUM**
- 2. PRESENCE OF UTERINE GLANDS IN
ENDOMETRIUM**
- 3. ENDOMETRIAL EPITHELIAL LINING IS
COLUMNAR EPITHELIUM**

FALLOPIAN TUBE (UTERINE TUBE)

MUCOSA

LUMEN

MUSCULAR COAT



CILIATED COLUMNAR EPITHELIUM

PEG CELLS (SECRETORY CELLS)

CILIATED CELLS

FALLOPIAN TUBE

POINTS FOR IDENTIFICATION

- 1. MUCOSA IS THROWN INTO FOLDS
AND IS LINED BY CILIATED
COLUMNAR EPITHELIUM**
- 2. SECRETORY CELLS (PEG CELLS)
USUALLY PROJECT IN THE LUMEN**

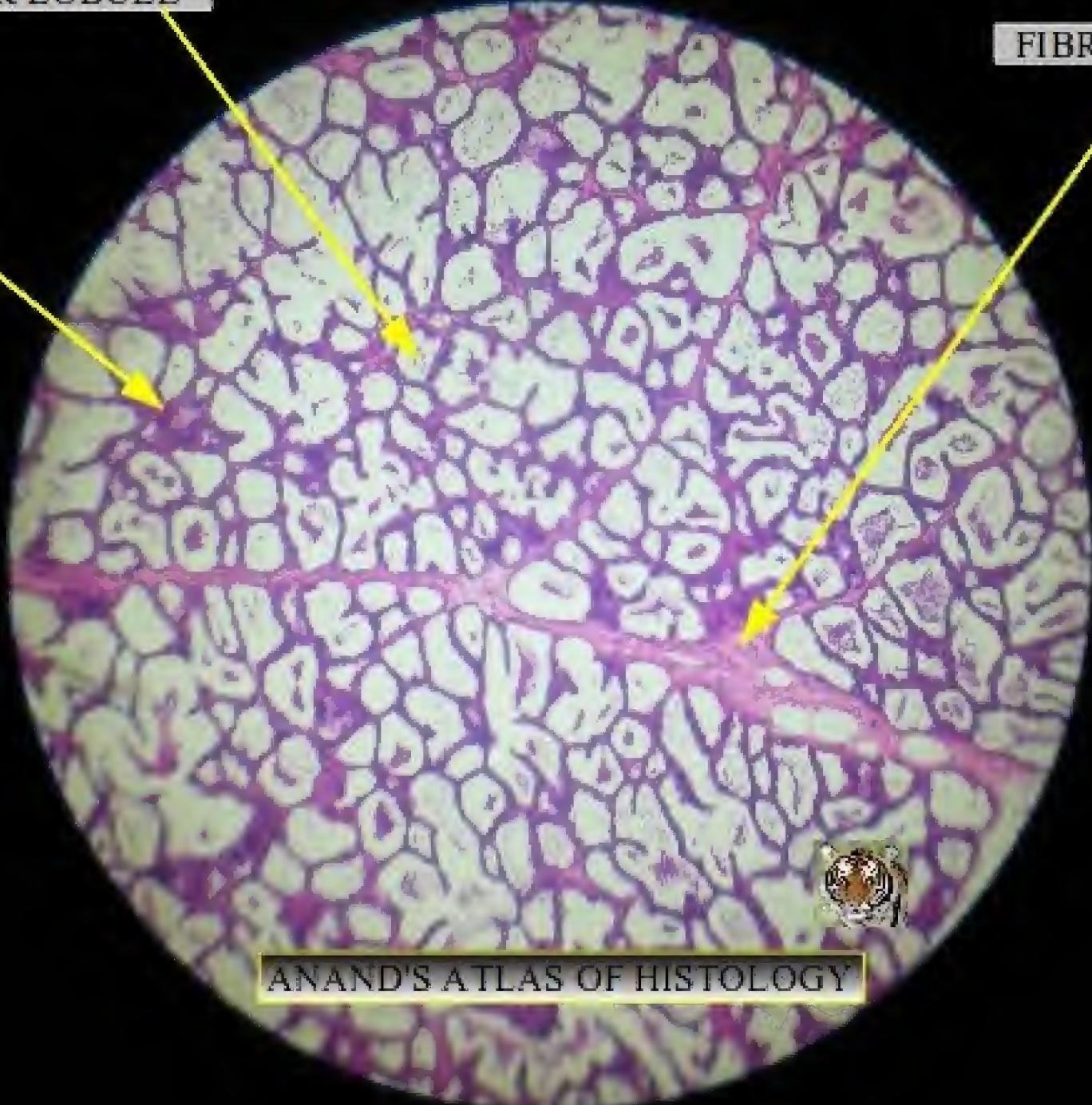
MAMMARY GLAND

ANAND'S ATLAS OF HISTOLOGY

GLANDULAR LOBULE

FIBROUS SEPTA

DUCT



ANAND'S ATLAS OF HISTOLOGY

GLANDULAR LOBULE

DUCT

MYOEPITHELIAL CELL



MAMMARY GLAND

POINTS FOR IDENTIFICATION

1. CUT SECTION SHOWS GLANDULAR LOBULES
2. GLANDS ARE OF RACEMOSE TYPE
3. MYOEPITHELIAL CELLS ARE SEEN AT THE BASE OF DUCTS
4. SOME LARGER DUCTS ARE BILAYERED

OVARY

ANAND'S ATLAS OF HISTOLOGY

GERMINAL EPITHELIUM

OVARIAN CORTEX

OOCYTES

GRAFFIAN FOLLICLE



ANAND'S ATLAS OF HISTOLOGY

ATRETIC FOLLICLES

OVARIAN MEDULLA



ANAND'S ATLAS OF HISTOLOGY

GRAFFIAN FOLLICLE

ZONA PELLUCIDA

THECA CELLS



OVARY

POINTS FOR IDENTIFICATION

1. PRESENCE OF CORTEX AND MEDULLA
2. OOCYTES ARE SEEN IN VARIOUS STAGES
OF MATURATION
3. GRAFFIAN FOLLICLE IS SEEN
4. ATRETIQUE FOLLICLES ARE SEEN IN THE
OVARIAN MEDULLA

PLACENTA

ANAND'S ATLAS OF HISTOLOGY

INTER VILLOUS SPACES

VILLUS

CYTOTROPHOBlast



ANAND'S ATLAS OF HISTOLOGY

SYNCYTIOTROPHOBlast

CYTOTROPHOBlast

INTERVILLOUS SPACES

HOFBAUER CELL

PLACENTA

POINTS FOR IDENTIFICATION

- 1. PRESENCE OF VILLI**
- 2. CYTOTROPHOBLASTS AND
SYNCYTIOTROPHOBLASTS ARE SEEN**
- 3. INTERVILLOUS SPACES ARE SEEN**

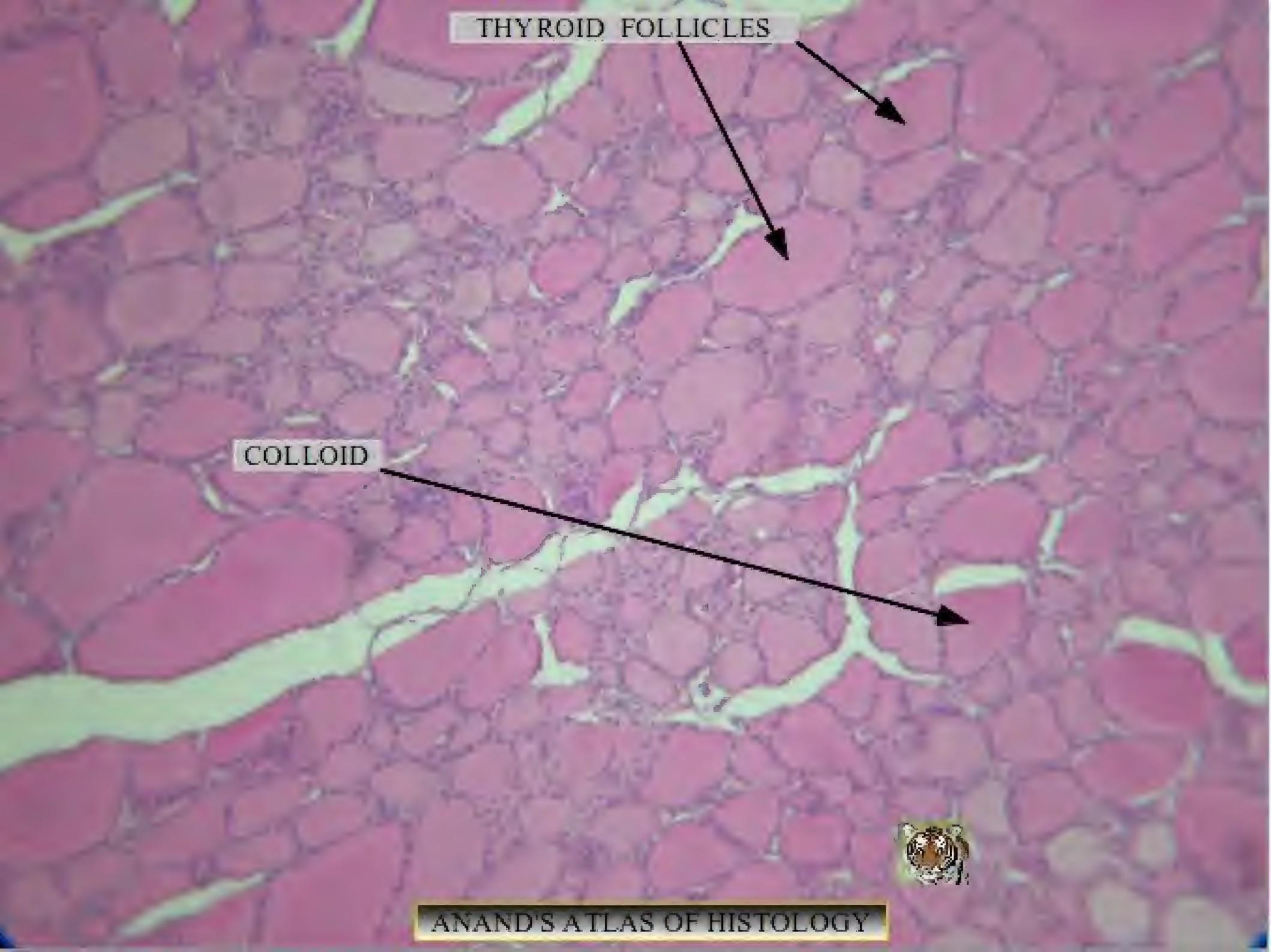
ENDOCRINE SYSTEM

LIST OF COLOUR PLATES

**THYROID GLAND
PARATHYROID GLAND
PITUITARY GLAND
ADRENAL GLAND**

THYROID GLAND

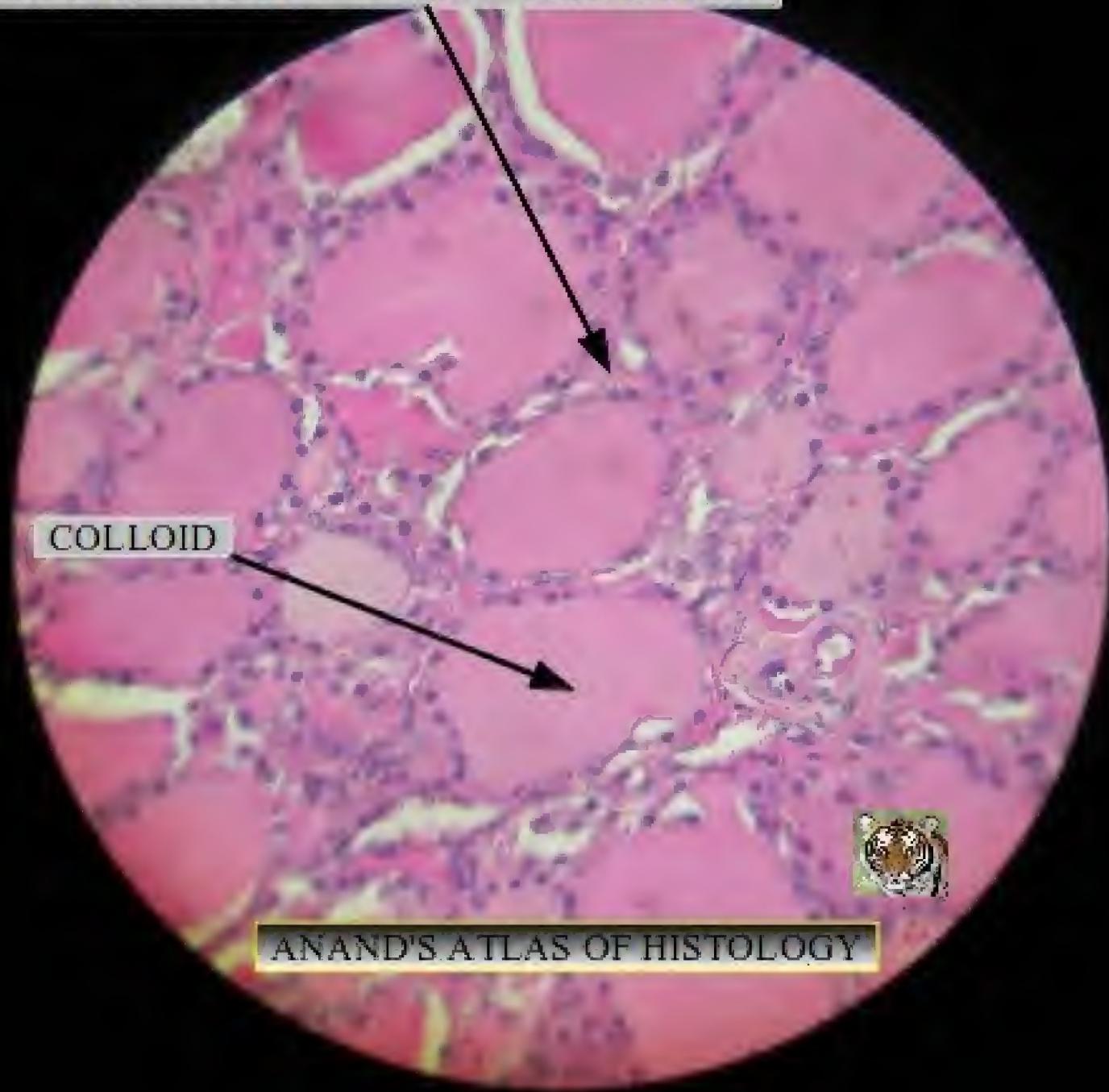
ANAND'S ATLAS OF HISTOLOGY



THYROID FOLLICLES

COLLOID

FOLLICLE LINED BY SIMPLE CUBOIDAL EPITHELIUM



ANAND'S ATLAS OF HISTOLOGY

THYROID GLAND

POINTS FOR IDENTIFICATION

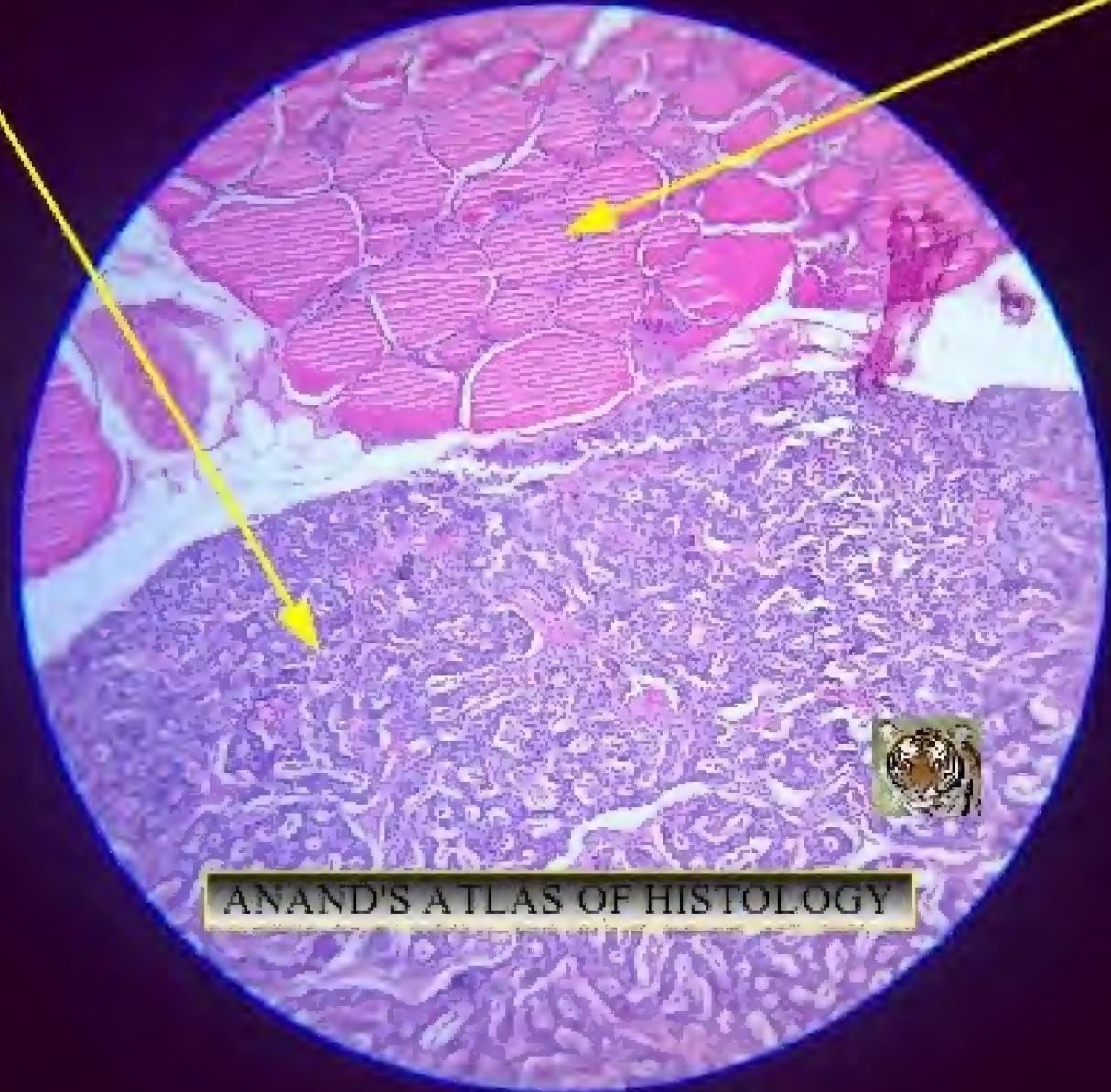
1. CUT SECTION OF THYROID GLAND SHOWS
THYROID FOLLICLES
2. FOLLICULAR CAVITY CONTAINS COLLOID
MATERIAL
3. LINING EPITHELIUM OF FOLLICLE IS SIMPLE
CUBOIDAL WHEN THERE IS MODERATE AMOUNT
OF COLLOID

PARATHYROID GLAND

ANAND'S ATLAS OF HISTOLOGY

PARATHYROID GLAND

THYROID
GLAND



ANAND'S ATLAS OF HISTOLOGY

CHIEF CELLS

OXYPHIL CELLS

PARATHYROID GLAND

POINTS FOR IDENTIFICATION

- 1. CUT SECTION SHOWS CHIEF CELLS AND OXYPHIL CELLS WHICH ARE ARRANGED IN CORDS**
- 2. CHIEF CELLS ARE SMALL ROUNDED CELLS WITH VESICULAR NUCLEI**
- 3. OXYPHIL CELLS ARE LARGE AND POLYHEDRAL**

PITUITARY GLAND

ANAND'S ATLAS OF HISTOLOGY

PARS POSTERIOR
(NEUROHYPOPHYYSIS)

PARS ANTERIOR (ADENOHYPOPHYSIS)

PARS INTERMEDIA
(RATHKE'S CLEFT)



ANAND'S ATLAS OF HISTOLOGY

PARS ANTERIOR (ADENOHYPOPHYSIS)

CHROMOPHIL
(BASOPHIL)

CHROMOPHIL
(ACIDOPHIL)

CHROMOPHOBES

SINUSOID



PARS POSTERIOR
(NEUROHYPOPHYSIS)

PITUICYTES

UNMYELINATED NERVE FIBRES



PITUITARY GLAND

POINTS FOR IDENTIFICATION

1. CUT SECTION SHOWS PARS ANTERIOR, PARS POSTERIOR AND PARS INTERMEDIA
2. PARS ANTERIOR SHOWS CHROMOPHOBES AND CHROMOPHILS
3. PARS POSTERIOR SHOWS UNMYELINATED NERVE FIBRES AND PITUICYTES

ADRENAL GLAND (SUPRA RENAL GLAND)

ANAND'S ATLAS OF HISTOLOGY

ADRENAL CORTEX

OUTER CAPSULE

ZONA GLOMERULOSA

ZONA FASCICULATA



ANAND'S ATLAS OF HISTOLOGY

ADRENAL CORTEX

ZONA FASCICULATA

ZONA RETICULARIS

ADRENAL MEDULLA



OUTER CAPSULE



ZONA GLOMERULOSA



SMALL POLYHEDRAL CELLS IN
ROUNDED CLUSTERS



ADRENAL MEDULLA

CHROMAFFIN CELLS



RETICULAR FIBRES



SINUOSIDS



ADRENAL GLAND (SUPRA RENAL)

POINTS FOR IDENTIFICATION

1. PRESENCE OF CORTEX AND MEDULLA
2. ADRENAL CORTEX IS MADE OF THREE LAYERS – ZONA GLOMERULOSA, ZONA FASCICULATA, ZONA RETICULARIS
3. ZONA GLOMERULOSA IS MADE OF SMALL POLYHEDRAL CELLS IN A ROUNDED CLUSTER
4. ZONA FASCICULATA IS MADE OF COLUMNS OF CELLS SEPARATED BY SINUSOIDS
5. ZONA RETICULARIS CELLS ARE ARRANGED AS ANASTOMOSING CORDS

ADRENAL GLAND (SUPRA RENAL)

POINTS FOR IDENTIFICATION

- 6. ADRENAL MEDULLA IS MADE OF GROUPS OF CHROMAFFIN CELLS EMBEDDED IN A NETWORK OF RETICULAR FIBRES AND SEPARATED BY WIDE SINUSOIDS**

SPECIAL SENSORY ORGANS

VISION

LIST OF COLOUR PLATES

CORNEA

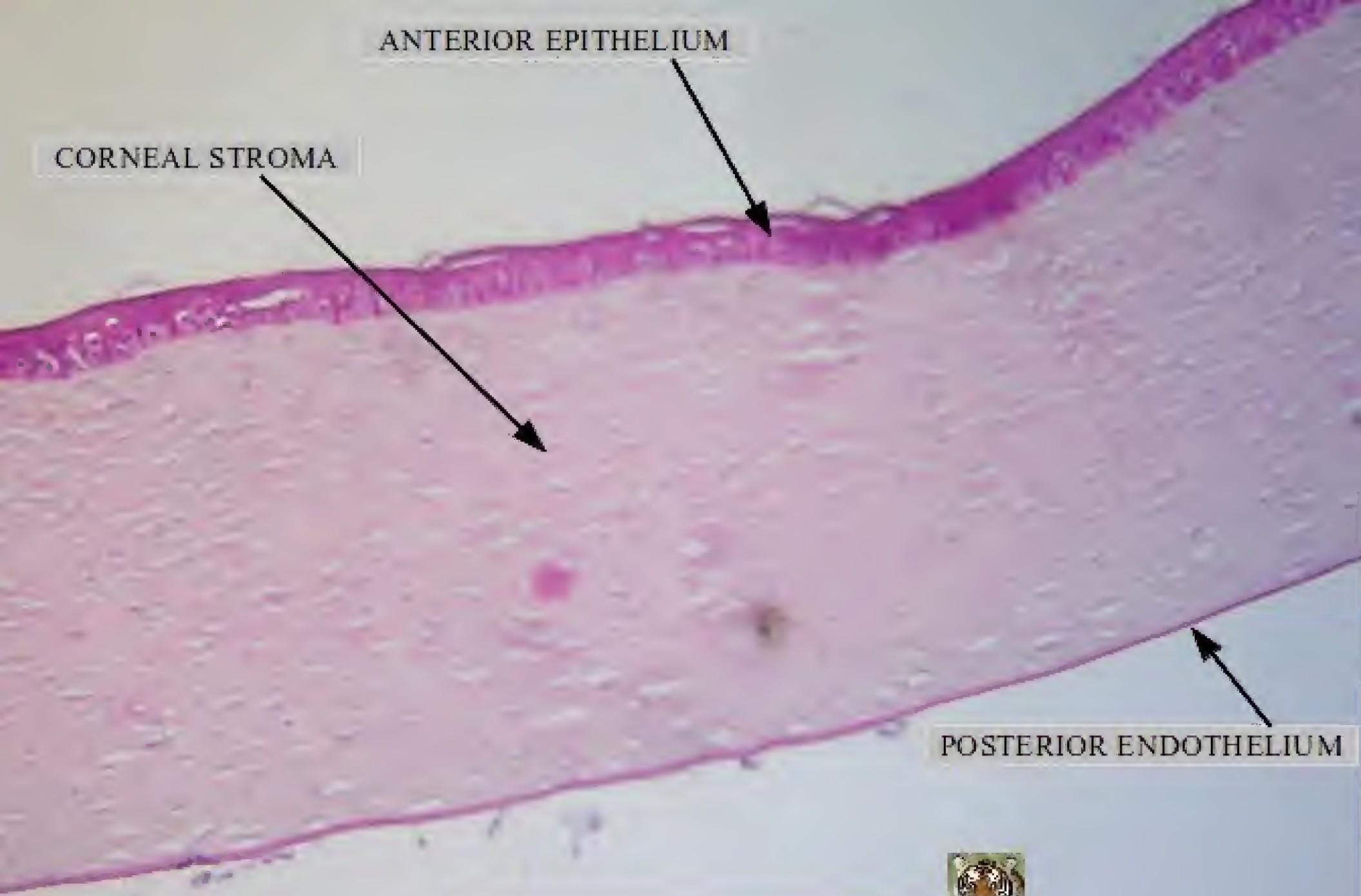
RETINA

LACRIMAL GLAND

EYELID

CORNEA

ANAND'S ATLAS OF HISTOLOGY



STRATIFIED SQUAMOUS NON KERATINISED EPITHELIUM

BOWMAN'S MEMBRANE

CORNEAL STROMA MADE UP OF
REGULARLY ARRANGED COLLAGEN FIBRES



CORNEA

POINTS FOR IDENTIFICATION

1. ANTERIOR EPITHELIUM IS MADE UP OF STRATIFIED SQUAMOUS NON KERATINISED EPITHELIUM
2. CORNEAL STROMA IS MADE OF REGULARLY ARRANGED COLLAGEN FIBRES
3. POSTERIOR ENDOTHELIUM IS SIMPLE SQUAMOUS EPITHELIUM

RETINA

ANAND'S ATLAS OF HISTOLOGY

LAYER OF RODS AND CONES



LAYER OF OPTIC NERVE FIBRES



PIGMENT CELL LAYER

EXTERNAL NUCLEAR LAYER

LAYER OF RODS AND CONES

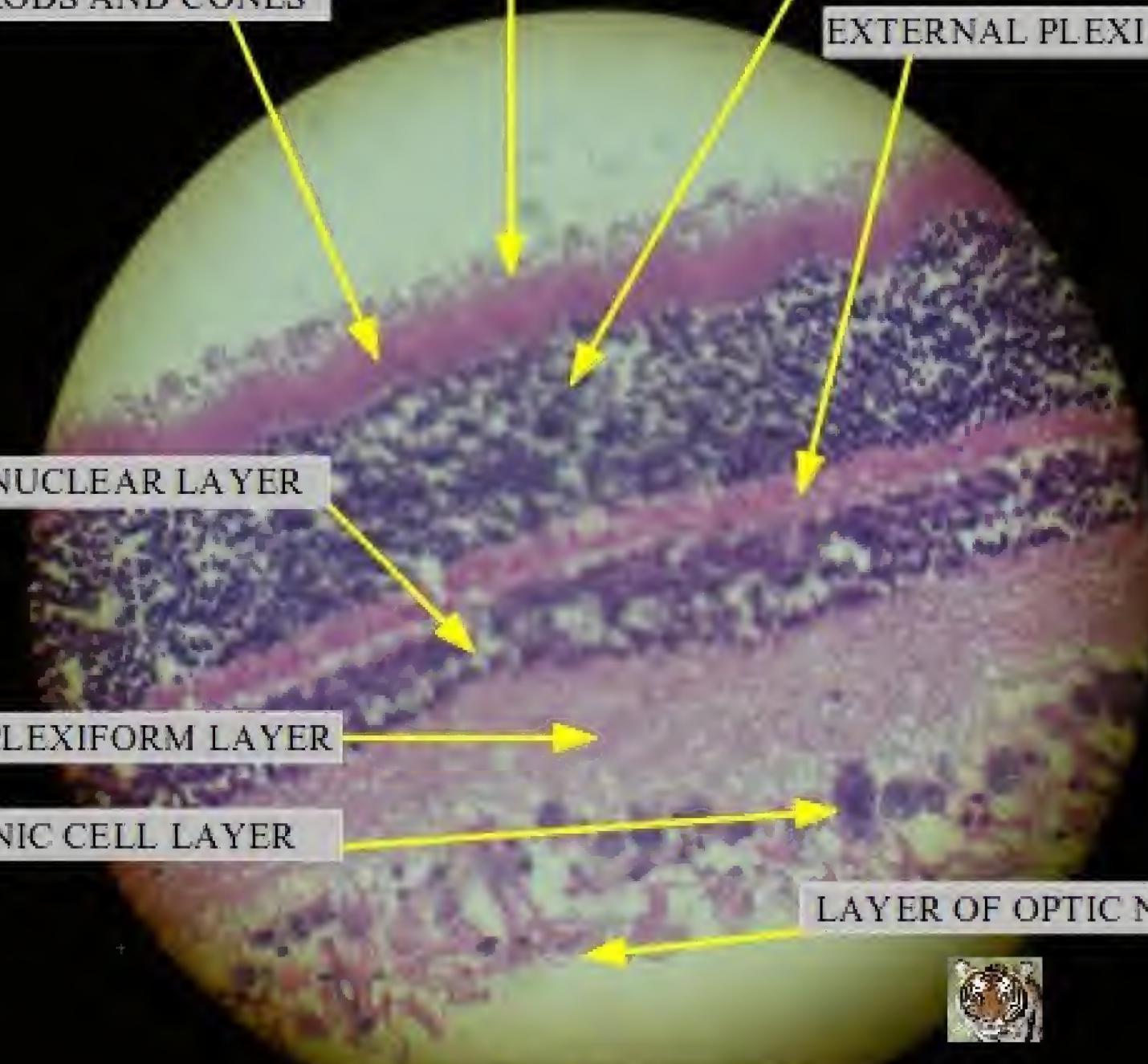
EXTERNAL PLEXIFORM LAYER

INTERNAL NUCLEAR LAYER

INTERNAL PLEXIFORM LAYER

GANGLIONIC CELL LAYER

LAYER OF OPTIC NERVE FIBRES



RETINA

POINTS FOR IDENTIFICATION

- 1. MADE UP OF 10 LAYERS**
- 2. PRESENCE OF LAYER OF RODS AND CONES**
- 3. PRESENCE OF GANGLIONIC CELL LAYER**
- 4. PRESENCE OF LAYER OF OPTIC NERVE FIBRES**

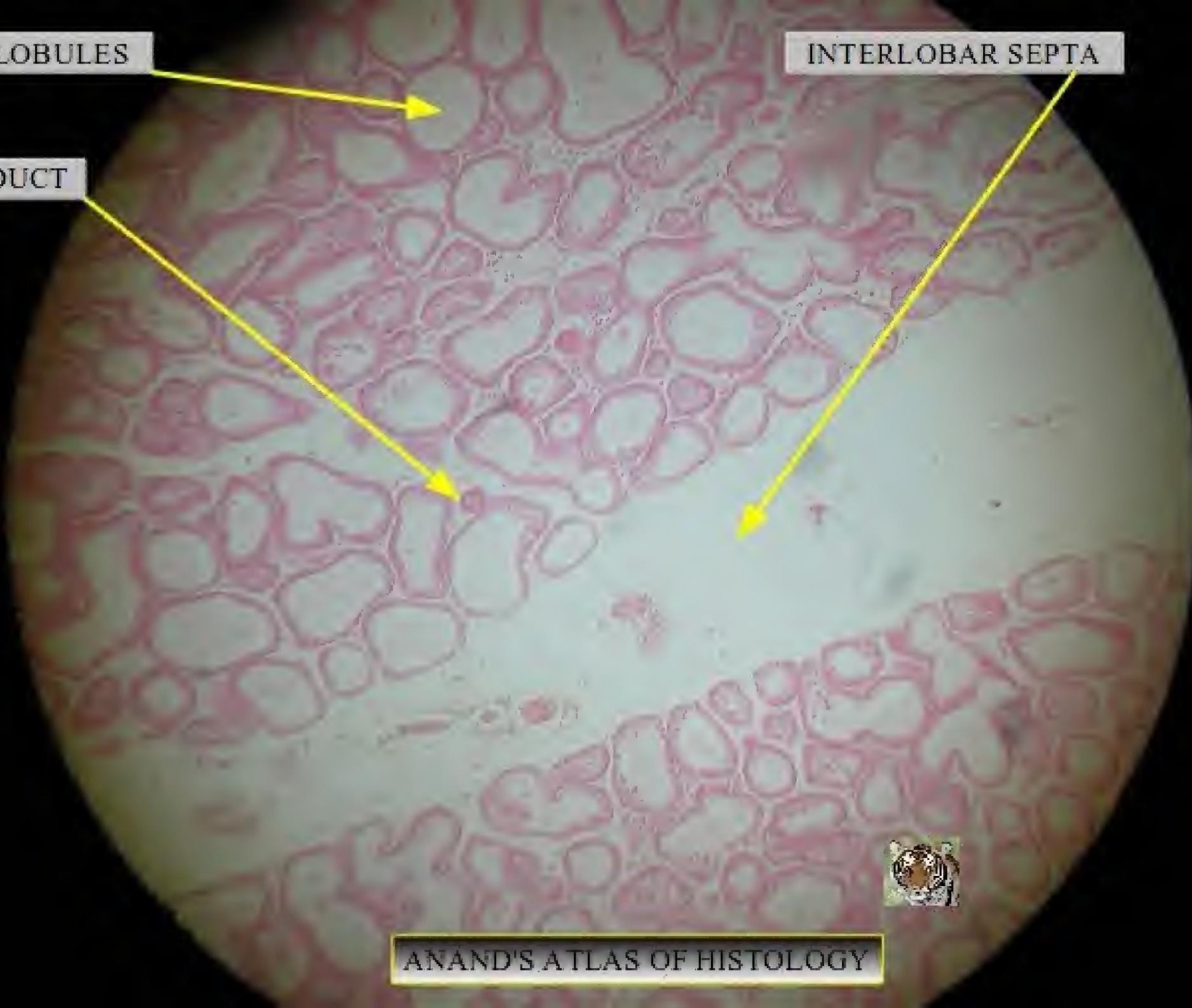
LACRIMAL GLAND

ANAND'S ATLAS OF HISTOLOGY

LOBULES

INTERLOBAR SEPTA

DUCT



LOBULES

SECRETIONS

TUBULOACINAR CELLS



LACRIMAL GLAND

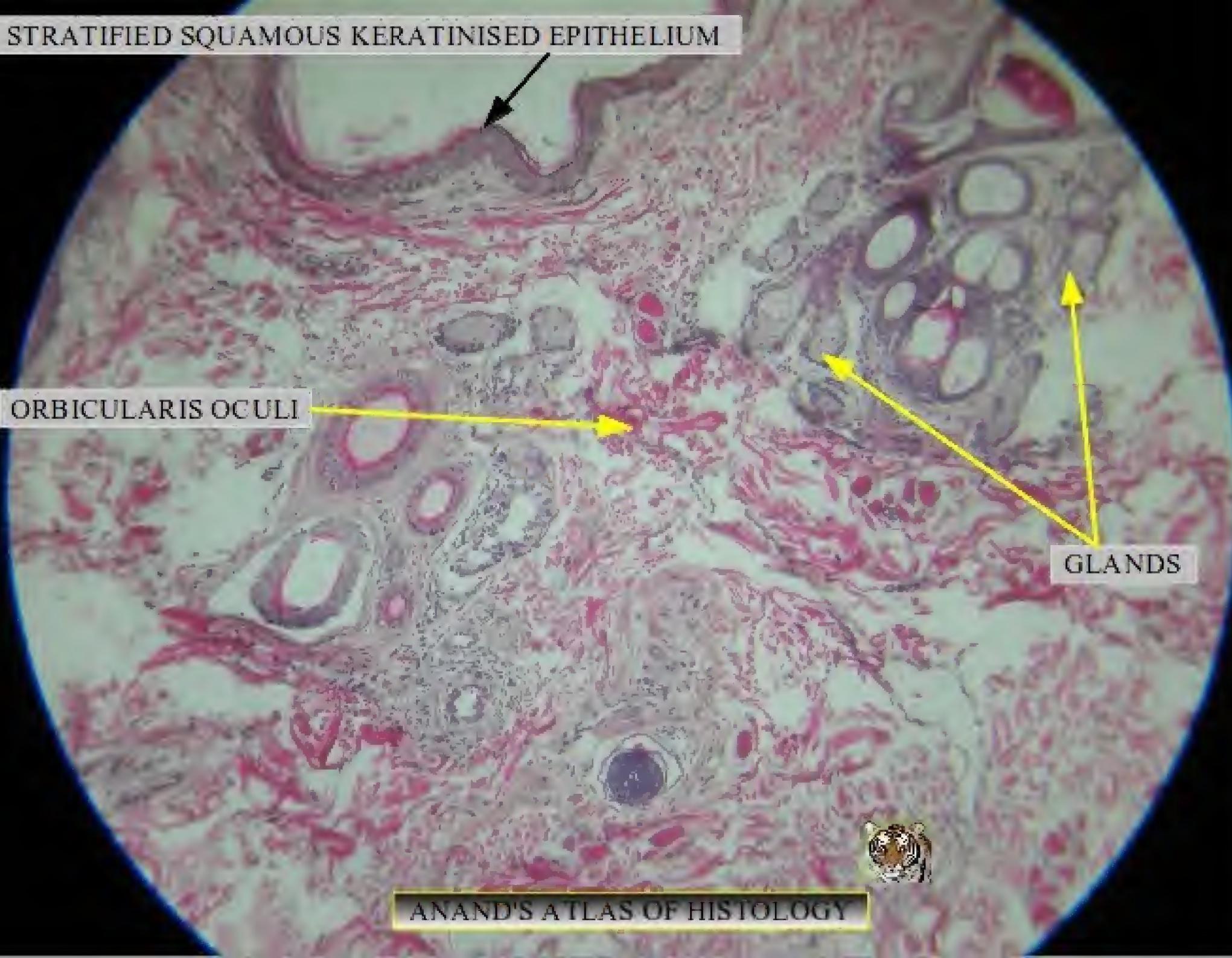
POINT FOR IDENTIFICATION

1. CUT SECTION SHOWS LOBULATED GLAND
2. LOBULE SHOWS TUBULOACINAR CELLS
3. PRESENCE OF INTERLOBULAR SEPTA

EYELID

ANAND'S ATLAS OF HISTOLOGY

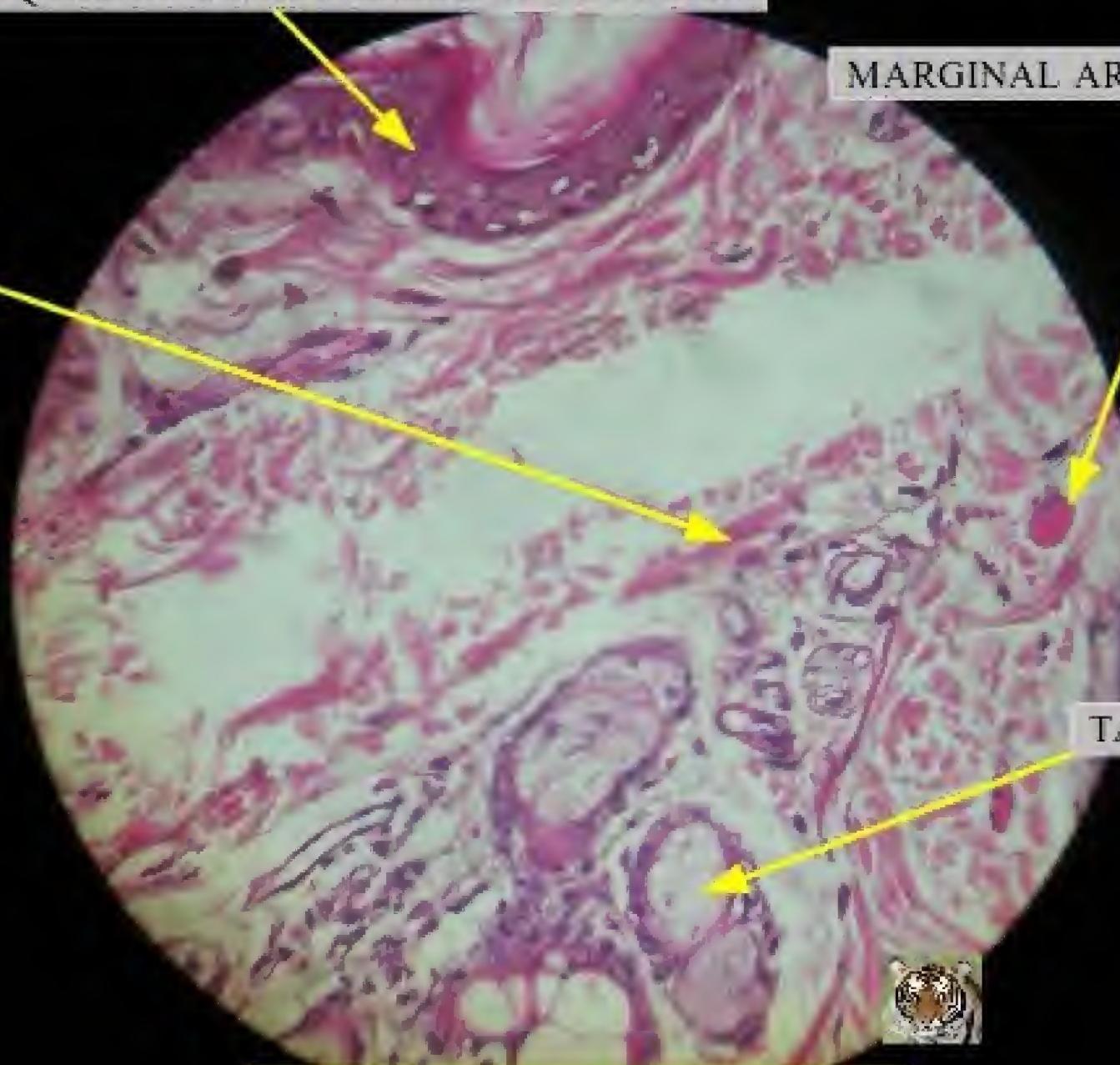
STRATIFIED SQUAMOUS KERATINISED EPITHELIUM



STRATIFIED SQUAMOUS KERATINISED EPITHELIUM

MARGINAL ARTERIAL ARCADE

TARSUS



TARSAL GLANDS

ANAND'S ATLAS OF HISTOLOGY

EYELID

POINTS FOR IDENTIFICATION

1. EPITHELIUM IS STRATIFIED SQUAMOUS KERATINISED EPITHELIUM
2. PRESENCE OF TARSAL GLANDS
3. PRESENCE OF SKELETAL MUSCLE

CENTRAL NERVOUS SYSTEM

LIST OF COLOUR PLATES

CEREBRUM

CEREBELLUM

SPINAL CORD

SENSORY GANGLION

AUTONOMIC GANGLION

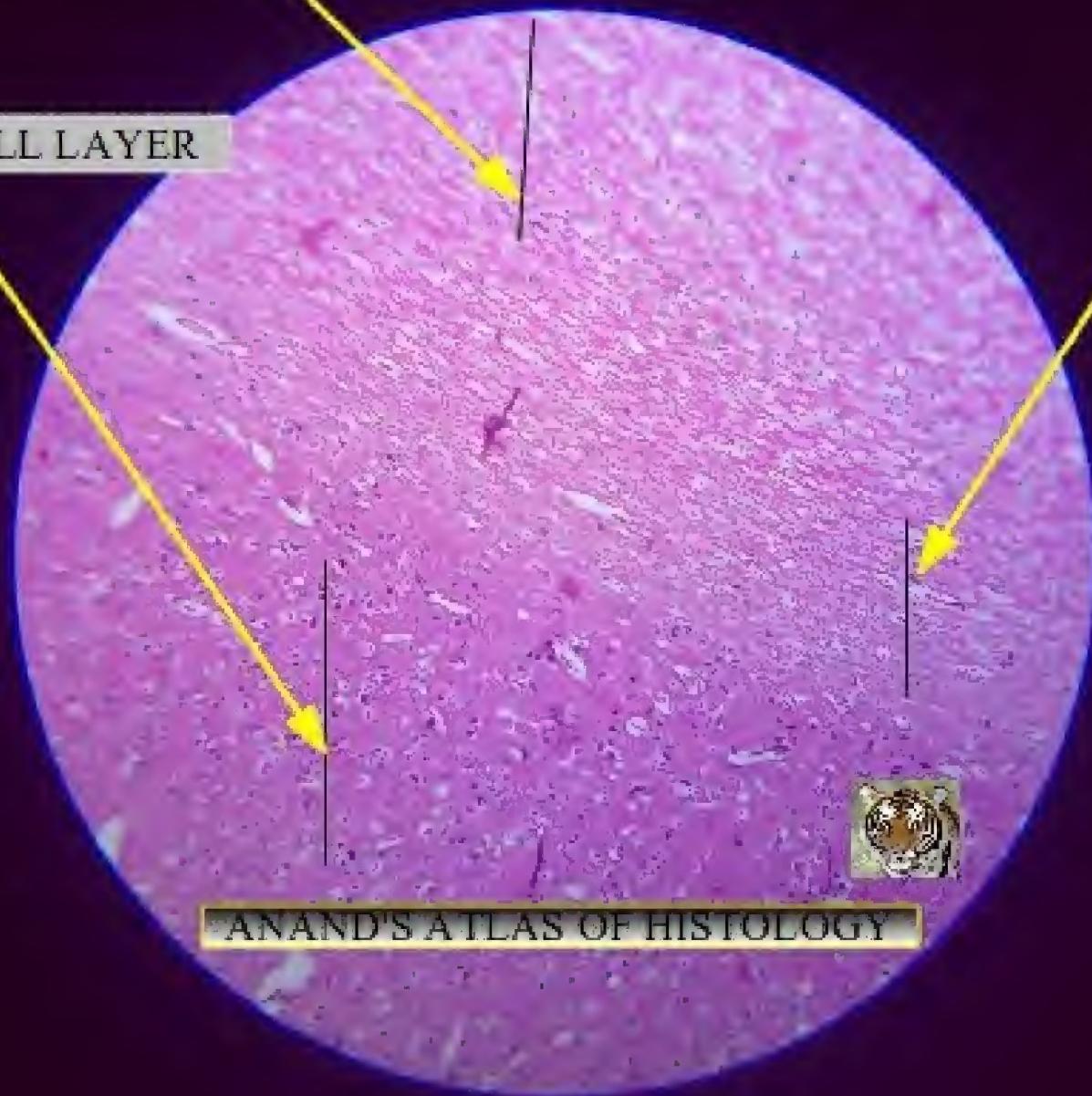
CEREBRUM

ANAND'S ATLAS OF HISTOLOGY

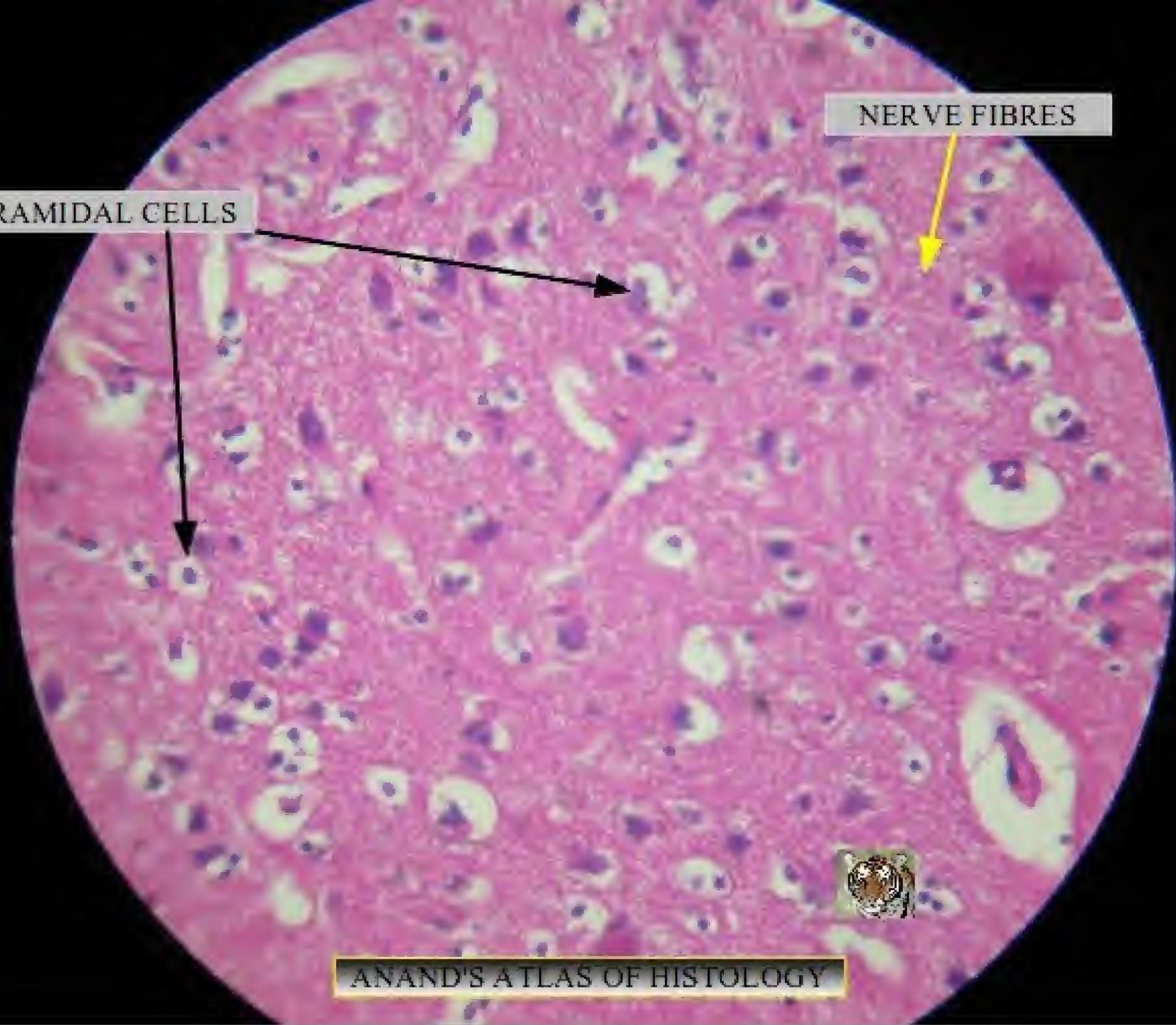
MOLECULAR CELL LAYER

EXTERNAL GRANULAR LAYER

PYRAMIDAL CELL LAYER



ANAND'S ATLAS OF HISTOLOGY



CEREBRUM

POINTS FOR IDENTIFICATION

1. CEREBRAL CORTEX IS MADE UP OF SIX LAYERS
2. GRANULAR LAYER CONSISTS OF CLOSELY PACKED STELLATE CELLS
3. INNER PYRAMIDAL LAYER CONSISTS OF LARGE PYRAMIDAL CELLS (BETZ CELLS)

CEREBELLUM

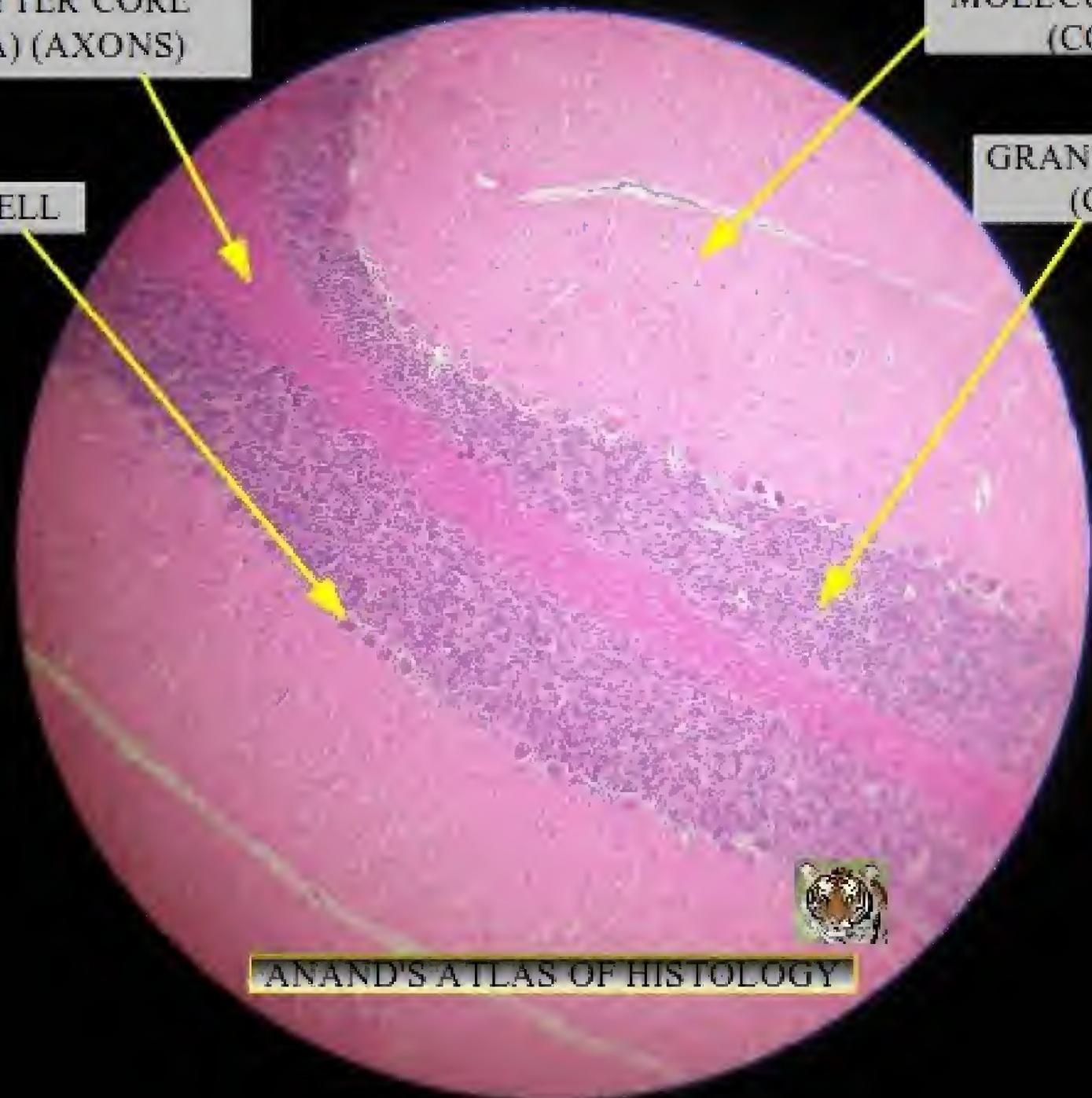
ANAND'S ATLAS OF HISTOLOGY

WHITE MATTER CORE
(MEDULLA) (AXONS)

PURKINJE CELL

MOLECULAR LAYER
(CORTEX)

GRANULAR LAYER
(CORTEX)



ANAND'S ATLAS OF HISTOLOGY

MOLECULAR LAYER

GRANULAR LAYER

PURKINJE CELL

WHITE MATTER

ANAND'S ATLAS OF HISTOLOGY

CEREBELLUM

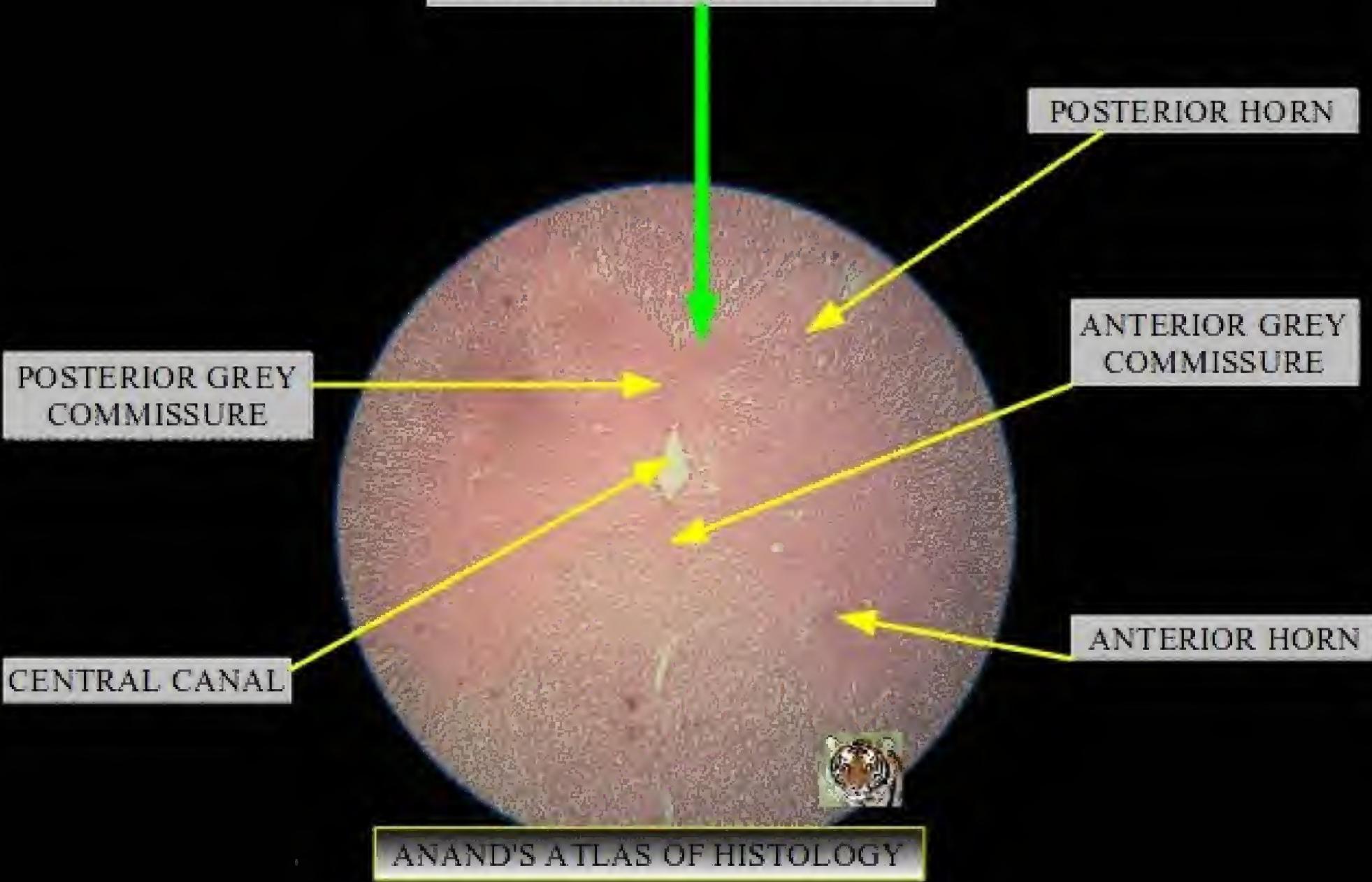
POINTS FOR IDENTIFICATION

1. MADE UP OF OUTER GREY MATTER AND INNER WHITE MATTER
2. GREY MATTER (CORTEX) MADE UP OF THREE LAYERS – MOLECULAR CELL LAYER, PURKINJE CELL LAYER AND GRANULAR CELL LAYER
3. WHITE MATTER (MEDULLA) IS MADE UP OF AXONS

SPINAL CORD

ANAND'S ATLAS OF HISTOLOGY

SPINAL CORD GREY MATTER



SPINAL CORD WHITE MATTER

POSTERIOR WHITE
COMMISSURE

POSTERIOR FUNICULUS

LATERAL FUNICULUS

ANTERIOR FUNICULUS

ANTERIOR WHITE
COMMISSURE

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SPINAL CORD

POINTS FOR IDENTIFICATION

1. PRESENCE OF GREY MATTER AND WHITE MATTER
2. GREY MATTER CONTAINS ANTERIOR AND POSTERIOR HORNS (LATERAL HORN IS PRESENT ONLY IN THE THORACIC SEGMENT)
3. WHITE MATTER CONTAINS ANTERIOR, LATERAL AND POSTERIOR FUNICULI
4. PRESENCE OF CENTRAL CANAL

SENSORY GANGLION

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NEURONAL CELL BODIES

MYELINATED NERVE FIBRES

CONNECTIVE TISSUE CAPSULE

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SATELLITE CELLS

MYELINATED
NERVE FIBRES

NEURONAL CELL
BODIES

SENSORY GANGLION

POINTS FOR IDENTIFICATION

- 1. LARGE NEURONS ARE SEEN ARRANGED IN THE PERIPHERY**
- 2. EACH NEURON IS SURROUNDED BY A LAYER OF SATELLITE CELLS**
- 3. CONNECTIVE TISSUE CAPSULE COVERS THE GANGLION**

AUTONOMIC GANGLION

ANAND'S ATLAS OF HISTOLOGY

CONNECTIVE TISSUE
CAPSULE

NON MYELINATED
NERVE FIBRES

NEURONAL CELL
BODIES

NEURONAL CELL
BODIES



NON MYELINATED
NERVE FIBRES



SATELLITE CELLS



AUTONOMIC GANGLION

POINTS FOR IDENTIFICATION

1. MEDIUM TO SMALL SIZED NEURONS ARE SEEN SCATTERED ALL OVER
2. SATELLITE CELLS ARE SEEN ARRANGED ON THE PERIPHERY OF THE NEURON BUT ARE NOT WELL DEFINED
3. CONNECTIVE TISSUE CAPSULE COVERS THE GANGLION

THANK YOU

ANAND'S ATLAS OF HISTOLOGY

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